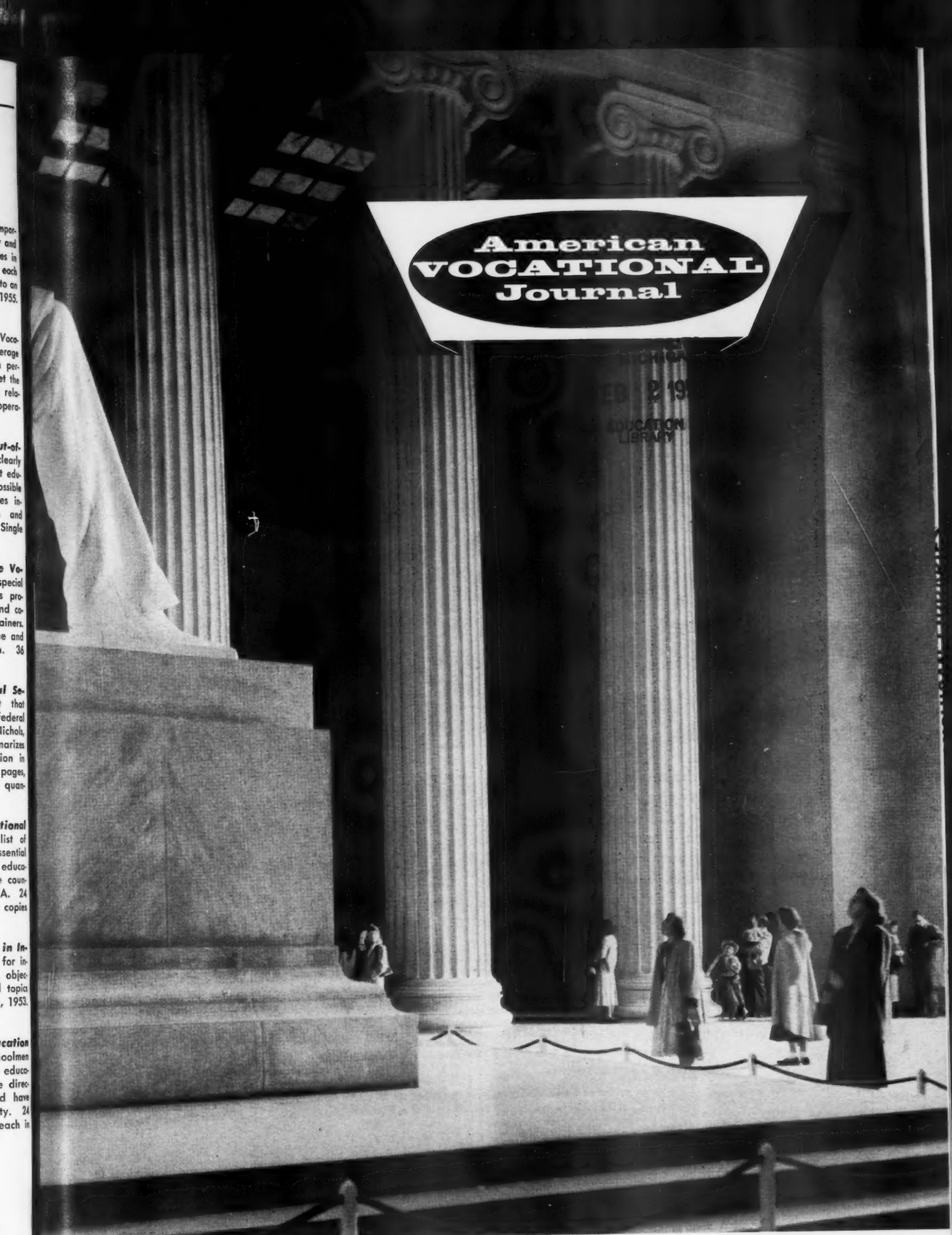


EDUCATION
LIBRARY

April, 1956

The Journal Salutes

THE DISTRICT OF COLUMBIA

SOUTH BEND... *Proved by Performance*

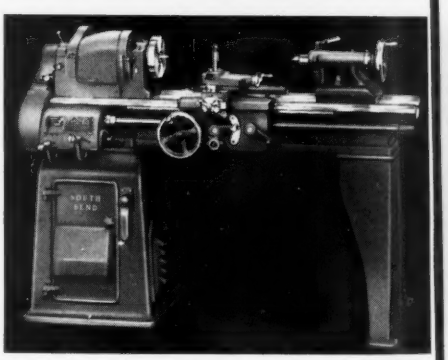
South Bend Lathes in Waukegan (Ill.) T.H.S.

The best proof of the superiority of South Bend 13" Lathes is their past record. Shop instructors the country over will tell you of their experiences with these lathes — how quickly students learn to handle them — how they withstand hard usage — their complete suitability for vocational training because they are sturdy industrial lathes. There is no better proof than actual performance under identical conditions — let this be your guide when you select lathes for your shop.

New MACHINE SHOP PROJECTS Book

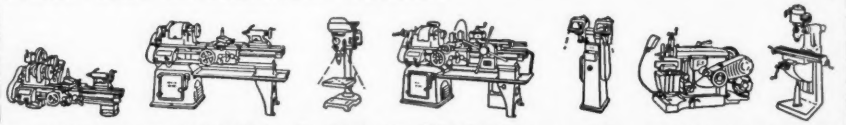
Contains 34 practical projects—graded to match abilities of beginning to advanced students. Each project consists of detailed drawing, bill of material, step-by-step instructions. 104 pages, 8½" x 11", $2.00.

SPECIAL OFFER TO SHOP INSTRUCTORS—Sample copy of project book and companion book "How To Run A Lathe", (value $2.50) sent for only $1.00.



13" x 4' South Bend Engine Lathe (less electrical equipment) f.o.b. factory..... $1533

PLEASE SEND INFORMATION CHECKED:



☐ 9" and 10" BENCH LATHES ☐ 10" to 16-24" FLOOR LATHES ☐ DRILL PRESSES ☐ ½" & 1" Collet TURRET LATHES ☐ TOOL GRINDERS ☐ 7" BENCH SHAPERS ☐ MILLING MACHINES

Name_____ School _____

City_____ State_____

Building Better Tools Since 1906 • **SOUTH BEND LATHE** • South Bend 22, Indiana

American VOCATIONAL Journal

Official Publication of the
American Vocational Association, Inc.,
Featuring exclusive coverage of vocational and industrial arts education

VOLUME 31 NUMBER 4 APRIL 1956

Editor-in-Chief
M. D. Mobley
Executive Secretary
American Vocational Association, Inc.
1010 Vermont Ave., N.W., Washington 5, D. C.

Managing Editor
Dorothy Robinson Davis

Editorial Assistant
Nancy Hall Kane

Editorial Board
Agriculture—George P. Deyoe
University of Illinois
Business—McKee Fisk
Fresno State College, Calif.
Distributive—William B. Logan
Ohio State University
Home Economics—Bernice McCullar
Georgia State Department of Education
Industrial Arts—William R. Mason
Cleveland, O., Board of Education
Trade & Industrial—Russell K. Britton
Denver, Colo., Board of Education

AVA Officers
President—J. F. Ingram
Alabama State Department of Education
Past President—Cecil E. Stanley
Nebraska State Department of Education
Treasurer—Charles W. Sylvester
6429 Blenheim Rd., Baltimore, Md.

Vice Presidents
Agriculture—R.E. Bass
Virginia State Department of Education
Business—Arthur L. Walker
Virginia State Department of Education
Distributive—Roy Fairbrother
Wisconsin State Dept., Voc'l and Adult Educ.
Home Economics—Dorothy K. Lawson
New York State Department of Education
Industrial Arts—Shriver L. Coover
State Teachers College (California, Pa.)
Trade and Industrial—Samuel L. Fick
California State Department of Education

The American Vocational Journal is published monthly, September to May, inclusive, by the American Vocational Association, Inc. Entered as second class matter at the Post Office at Washington, D. C., under Act of March 3, 1879. Contents are copyrighted by the American Vocational Association, Inc. All members of the American Vocational Association, Inc., receive the Journal; 25 per cent or more of membership dues reserved for Journal. Membership applications should be submitted through state vocational association secretaries. Orders for subscriptions for libraries and non-members at $3.00 a year should be sent to AVA headquarters, 1010 Vermont Ave., N. W.

SPECIAL FEATURES

4 ..... Guest Editorials
Hobart Corning and Samuel Spencer

5 ..... The Journal Salutes Washington, D. C.

21 ..... Legislative Victory

22 ..... See You in St. Louis

INDUSTRIAL ARTS

14 ..... Ceramics
by Vernon D. Seeley

HOME ECONOMICS

16 ..... Our Changing Society
by Helen G. Hurd

AGRICULTURAL EDUCATION

19 ..... What Do Vo-Ag Teachers Like Best About Their Profession?
by Vernon B. Sultenfuss and Arthur H. Ahalt

27 ..... Future Farmers Meet in Egypt
by Louis M. Sasman

TRADE AND INDUSTRIAL

23 ..... How Oregon Serves the Isolated Apprentice
by William G. Loomis

BUSINESS EDUCATION

25 ..... Building for Business Programs
by Rodney G. Wessman

DISTRIBUTIVE EDUCATION

28 ..... DE Does It Again!

REGULAR FEATURES

3 ..... From the Nation's Capital
by Dr. M. D. Mobley

30 ..... Around the Nation with Vocational Education

33 ..... Association News

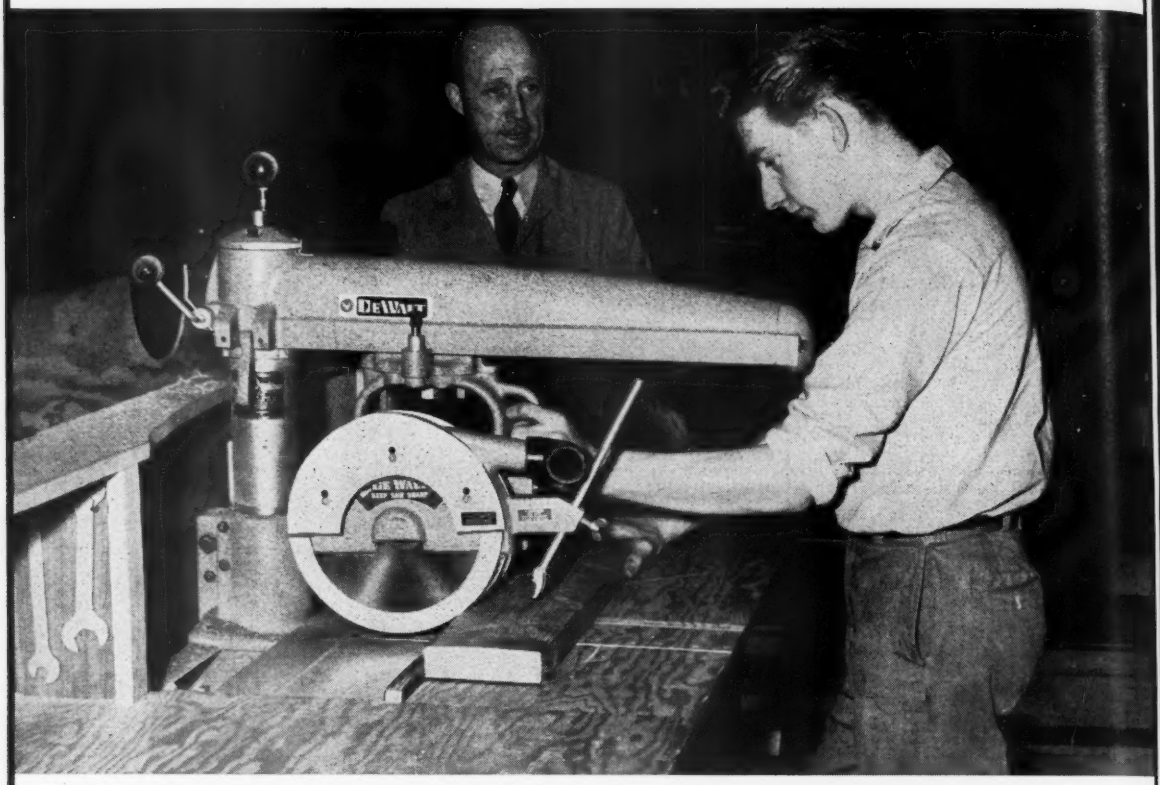
35 ..... Personals

38 ..... From the Office of Education

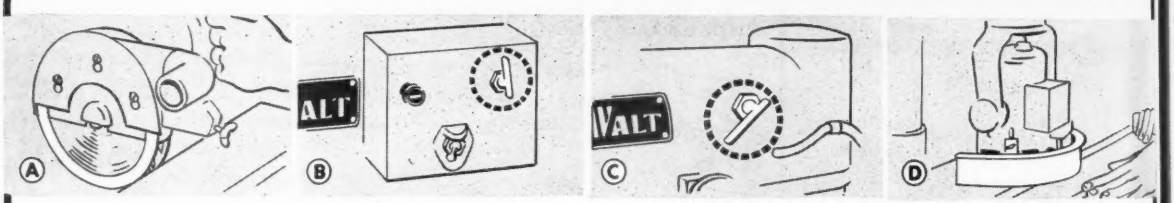
39 ..... Books and Bulletins

The cover: Dan Martin, photography instructor, Chamberlain Vocational High School in the District of Columbia, photographed the appealing shot of the Lincoln Memorial for this month's cover. With superior skill Mr. Martin has caught the inspiration that the world-famous statue sheds to those who pass. In saluting the District of Columbia the *Journal* salutes Lincoln and other great American leaders whose wise direction of national affairs is daily reflected in the democratic way of life that we cherish.

Future job safety is your responsibility...



And De Walt® has the safest record in industry!



You need these exclusive operating safety features: **A**—Simpler, safer top-side cutting with exclusive safety guard. See your mark *and* your saw. **B**—Power brake stops saw in 4 seconds for *added* safety. **C**—Safety key switch prevents unauthorized use. **D**—De Walt becomes tilting arbor shaper with exclusive shaper guard—gives 50% more shapes per cutter. Combines 12 basic power tools. Builds into workbench, gives safer straight-line handling.

Train your students on an AMF De Walt—preferred in both home and industry for accuracy, versatility—*plus the safest record of performance.* Arm raises, lowers, swings 360°. Motor and saw ride on arm, rotate 360°, tilt downward past 90°. Powerful direct-drive motor accommodates any circular tool, saves cost of separate machines. De Walt's the saw your students will later use!

2 popular sizes for schools...GW-I, 1½ hp, 10" size for industrial arts...GA-N, 3 hp, 12"-14" size for vocational training.

See your supplier or send for FREE BOOKLET.

Another AMF Product
DE WALT POWER TOOLS

De Walt Inc., Dept. SS-56-4, Lancaster, Pa., Subsidiary of AMERICAN MACHINE & FOUNDRY COMPANY

☐ Please send me FREE BOOKLET on Job-Tested Safety Cutting Methods
☐ Please send information on De Walt 16mm sound classroom film

Name_____
School_____
Address_____
City_____ Zone____ State_____

☐ *Students!* Check here for special literature

from the Nation's Capital

M. D. Mobley

THE JOURNAL salutes our Nation's Capital. Through able leadership and devoted service of teachers and officials, a comprehensive and high quality program of vocational education has been developed as a part of the educational offering of the District of Columbia. The JOURNAL, through its salute, is proud to tell the story of the vocational education program now in operation in Washington.

Another Great Victory. On March 5 another great legislative victory for vocational education was won. The U. S. House of Representatives approved without a dissenting vote the full $29,267,081 authorized for vocational edueation under provisions of the George-Barden Act and deleted the restrictive language limiting the amount available for Distributive Education. This is an increase of almost $3 million and is the first time the House has approved the full amount authorized since the George-Barden Act became law on August 1, 1946. In addition, the House approved, on an ear-marked basis, $550,000 for the Vocational Division of the U. S. Office of Education. This too is the full amount authorized under the Smith-Hughes and George-Barden Acts.

The Office of Education, with the full support of the AVA, also received a substantial increase above the amount appropriated last year. A portion of the increase will be used to finance and encourage research in education.

At the same time that the House approved an increase for vocational education, it reduced the total appropriations for the Department of Labor by $40,335,150 and the Department of Health, Education and Welfare by $76,762,069. This emphasizes the great victory for vocational education.

The Appropriation Bill (H. R. 9720) is now being considered by the U. S. Senate. Hearings before the Senate Subcommittee that handles appropriations for the Departments of Labor and Health, Education and Welfare are now in progress. It appears that the Senate will concur in the action of the House on the appropriation for vocational education.

Distributive Education. AVA's continuous battle – beginning in 1951—waged in behalf of distributive education will likely show results for fiscal '57. Some groups and individuals during the five-year battle advocated restoration of funds for distributive education through reduction in the appropriations for the other three federally-aided vocational programs. National Congress would not agree. In light of the attitude of National Congress, your AVA promoted the idea that federal funds for distributive education be restored without reducing the appropriations for the other three federally-aided programs.

Total Amounts Available. If the U. S. Senate concurs in the action of the House, the following amounts will be available for fiscal 1957 for each of the four federally-aided vocational programs :

	George-Barden	*Smith-Hughes*
Agriculture	$10,241,610.69	$3,054,662.44
Distributive	2,602,143.12	
Home Economics	8,197,415.07	
Trades and Industry	8,225,911.70	3,104,434.74*
Teacher-Training		1,114,233.04**

The Office of Education will announce to state officials the amounts available to the several states and political sub-divisions for each of the four federally-aided programs as soon as the appropriation measure has been approved by the Senate and signed by the President.

Increase in Vocational Funds. Assuming the Senate will concur in the action of the House, it will mean that since the fiscal year ending June 30, 1953, the appropriation for vocational education will have been increased from $18,673,261 to $29,267,081—an increase of $10,593,820. Since the federal vocational funds are usually matched by approximately $5 of local and state money for each federal dollar, this will mean that the amount of money for salaries of teachers and officials in the federally-aided programs will have been increased from approximately $129,700,000 to $182,700,000 in a period of four years. This does not include the millions spent for buildings, equipment, supplies and salaries of teachers in non-federally-aided programs of vocational education. Nor does it include vast sums spent for industrial arts and guidance.

Though there has been a great increase in funds for vocational education, the amount available is far short of the total funds needed.

Developments in Russia. For more than six years we have been calling to the attention of Congressional committees, audiences of various sorts, and reporters of newspapers and magazines, the great development taking place behind the Iron Curtain in the field of vocational, technical and scientific education. Though much has been done to expand these programs in this country, we have learned from reliable sources that Russia is forging ahead of the United States in the training of engineers, scientists, technicians and skilled workers.

Without a doubt one of the long-time goals of the Soviets is to increase and improve production and thus compete with the United States and other free nations for the markets of the world. A few days ago the press of our nation carried stories stating that Russia is ahead of the U. S. and all other nations in the development and production of jet propelled passenger planes. The press has also carried stories indicating that Russia is ahead of us in the guided missile program.

From facts made available in the last 12 months, Russia is making a

(Continued on page 40)

---

* A portion of the T and I Smith-Hughes funds may be used for home economics.

** Smith-Hughes Teacher Training funds may be used for training teachers and certain other personnel in agriculture, home economics and trades and industry. George-Barden funds may be used for same general purposes.

In These Pages

The hometown of AVA headquarters gets special attention this month with the JOURNAL's salute to D. C. It's good to present the successful story of vocational and practical arts education in the unique geographical area that houses the world's most famous capital city.

Additional April specials include features for every field.

In an economy where the population structure has completely new aspects, material such as *Our Changing Society*, page 16, is certainly required reading. While Dr. Hurd's presentation is our home economics contribution, it will have wide appeal for all JOURNAL readers.

Industrial arts instructors have a complete teaching unit on ceramics (for use when Monday morning comes), page 14.

Business educators will learn much from the experiences of Bakersfield College in planning new facilities for expanding business enrollments. Here again we see the touch of our changing society—alert school people matching the needs of the increased forces of young people, page 25.

From Oregon comes a practical account of an effective program of related instruction for the isolated apprentice, page 23. A problem that has had the scrutiny of educators for some time seems to have been solved in this western state.

Results of a new approach in agricultural education research are featured on page 19. In a recent study, vo-ag teachers of at least ten years' experience were asked what they like best about their profession.

The story of a DE student who found not only a career but encouragement and help, too, is on page 28. DE coordinators will want to refer to this reassuring contribution in their public relations activities.

In the JOURNAL's regular departments you'll find the latest in professional activities throughout the nation—as well as the story of AVA member No. 30,000, page 34.

Coming Up!

May will bring the JOURNAL's salute to Missouri—convention state for the golden anniversary vocational meeting. This issue, the last until September, will be wide in its coverage of important news for you!

GUEST EDITORIALS

Hobart Corning, Superintendent, D. C. Schools

THE PATTERN OF VOCATIONAL education which has taken form in the United States since the passage of the Smith-Hughes Act in 1917 is worthy of careful appraisal. It is a design in secondary education fashioned to meet the needs of industry and at the same time the needs of certain youth whose school retention expectancy is in general limited. The "certain" youth, furthermore, are those young people whose interests and aptitudes give promise of success in the skilled trade areas for which the courses of instruction prepare. The nearly tragic shortage of skilled workers during the emergency period of the first World War set the general specification for the students who were to be served in these programs, for here was to be no clinic for the crippled but rather a school for the able, whose graduates would man the stations of American industry to guarantee a production potential counted upon to safeguard the destiny of the free world.

These graduates proved to be quite acceptable to industry. As advanced apprentices they quickly adapted to the farm, the factory, and the marts of trade, and moved smoothly into journeyman status. Vocational education became the creature of industry as well as of the schools, and so it is today.

Since that time billions of federal dollars have been provided on a matching basis to sustain the program. The industrial production requirement for the rising living standards of a peaceful world, plus the mobilization of industry necessary for war or rumors of war, do not suggest that any de-emphasis of vocational education could in reason be contemplated in the forseeable future.

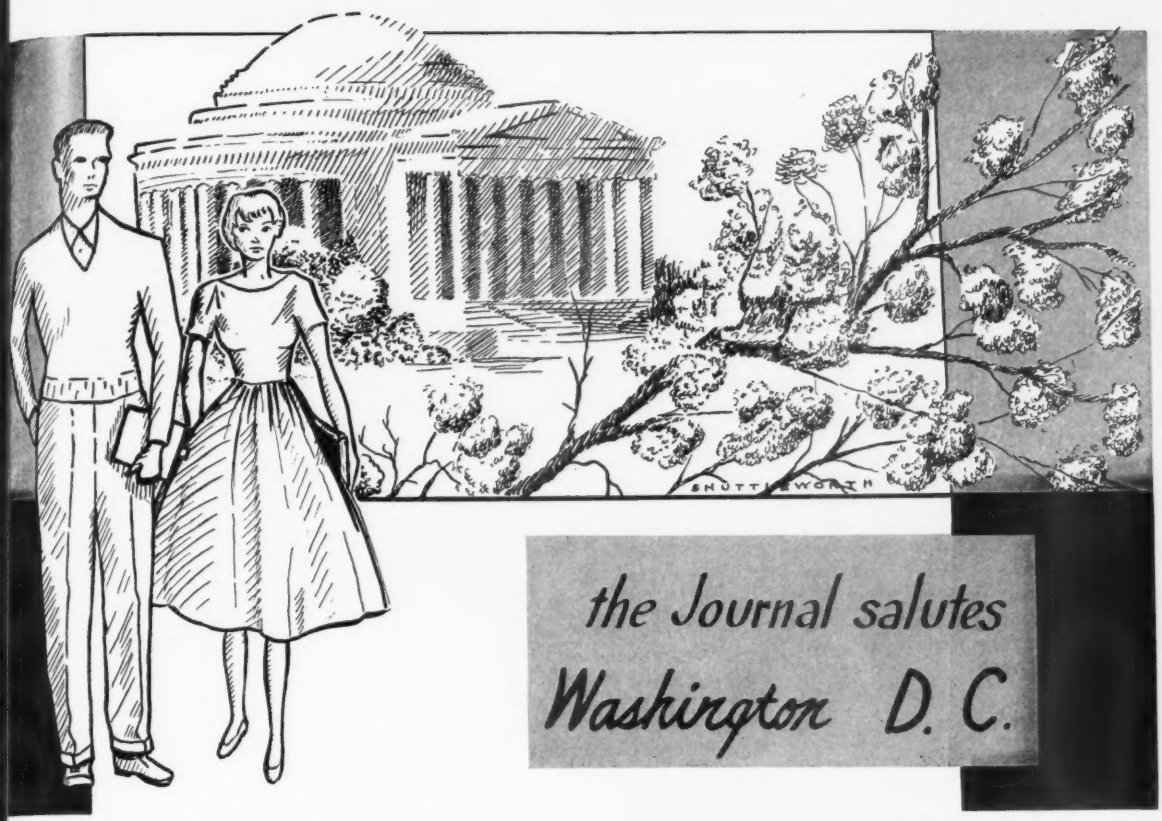
To meet the criticism that specialization on this level tends to stunt the growth of students in those general areas of development necessary for good citizenship and a full life, it has been encouraging to note an increasing trend to balance the curriculum in the vocational schools with a more adequate measure of general cultural subjects. Also, with the gradual rise in the minimum acceptable age for initial employment it can be expected that vocational specializations may be pushed as high as even the 13th and 14th grades, allowing greater opportunity for excursions into the fields of general education.

When I say the pattern for vocational education is worthy of study, I have in mind the approximately 50 per cent of our youth of secondary school age who are neither preparing to enter the skilled occupations nor are destined to enter college. These 50 per cent are for the most part enrolled in our regular high schools with but meagre and accidental curriculum provision for the occupational phase of their life adjustment needs. They range from the gifted to the backward. May I express the hope that vocational educators and those in the field of general education may continue to work through the medium of the curriculum of the comprehensive high school to achieve the desired objectives for this group, whose needs were brought in focus by Dr. Prosser more than a decade ago. I believe that the experience in vocational education in the past 40 years holds many lessons of value for this purpose.—HOBART C. CORNING, Superintendent of Schools, Public Schools of the District of Columbia.

Samuel Spencer, President, D. C. Commissioners

THE NATION'S SYSTEM of free schools carries the dual responsibility of developing in our children basic knowledge of the professions and sciences and, at the same time, the training of them for competence in the vocational skills essential to industrial advancement. This latter objective is effectively served by the vocational programs included in the public schools of the United States.

(Continued on page 36)



how the nation's capital city effectively translates vocational philosophies to meet unique needs

The artwork that appears on this page is the original contribution of a District of Columbia student—Karel Shuttleworth, Chamberlain Vocational High School, Washington, D. C. Karel, enrolled in advertising art, prepared this appropriate heading specifically for use with the *Journal's* salute to D. C. this month.

This article was prepared by the administrative and supervisory staffs for vocational education in the public schools of the District of Columbia, in cooperation with the District of Columbia Vocational Association and the National Capital Vocational Association.

JUST BEYOND THE MARBLE columns and the stretches of green mall that woo the eye of the visitor to the nation's capital, lies the real city—the city of families and homes and businesses and schools. Washington is the seat of government, a kind of federal city—state, perhaps the capital of the world, but it is also a city of people.

Washington
A City of "Working" People

It is a community of working people—over 62 per cent of its population are in the labor force. The last available figures show within the limits of the city itself 625,800 employed persons, of whom 269,300 are in government; 86,300 in hotel and personal services; 31,200 in finance, insurance and real estate; 128,400 in wholesale and retail trade; 42,300 in utilities; 42,100 in construction; and 26,200 in manufacturing.

Recognizing the federal government as the largest single employer, it should be remembered that a large percentage of the varied occupations found in civil service parallel very closely those found in private enterprise. Research scientist, clerk-stenographer, laboratory technician, personnel manager, registered nurse, motor repairman—these are the government workers.

Private industry flourishes in a pattern usual to a major city. The metropolitan area of Washington, with a population of over a million and a half, extends considerably beyond the geographical limits of the District of Columbia and embraces mushrooming suburban communities on all sides. The construction field is active both for private building and public works. The hotel and restaurant trade is sustained by tourist, convention and business visitors. The graphic arts industry, transportation and other utilities, hospitals, wholesale and retail establishments, all require their share of well-trained, efficient workers.

More and more national organizations representing education, busi-

ness, agriculture, civic service, management, and labor are establishing headquarters in Washington. Very recently the International Brotherhood of Teamsters dedicated its new marble office building, just across the park from the Capitol. All of these add to the roster of skilled labor.

Washington is a city of almost limitless educational and cultural resources. Dr. Leonard Carmichael, Administrative Director of the Smithsonian Institution, alluded to these endowments as "acres of diamonds" as he addressed the 4,086 teachers and officers of the city's public schools at Constitution Hall in February. Museums, art galleries, libraries, research centers, public buildings, military installations, shrines and memorials abound with the materials of learning. Five private universities, the District of Columbia Teachers College, and the Graduate School of the Department of Agriculture are within the city, and a state university is just over the border. What better neighbors could be selected than the Vocational Division of the U. S. Office of Education and the headquarters of the AVA!

Education Geared to Industry

The program of vocational education in the public schools of Washington has been derived from the needs of industry and the people. The objectives have been education for living as well as education for making a living. The close cooperation and generous support of labor, management, civic and governmental groups continue to make the program increasingly effective.

The trade preparatory program is centered in five vocational high schools on the 10-12 grade level, with a total enrollment or 2,109 and a wide range of offerings in trades and industries, distributive education, agriculture, and home economics. Closely related are the courses in industrial arts, business, and home economics that are part of the curriculum of the 23 junior high schools and 11 senior high schools. Provision in plant and curriculum is now in process at one high school to offer some terminal courses on the technical level.

The adult program operating in 11 centers includes a variety of apprentice and preemployment classes in trade and industrial subjects for men; a wide selection of courses in distributive occupations designed to meet the expressed needs of local business interests; vegetable production in the field of agriculture; preemployment classes in practical nursing, cosmetology, office machines, foods, and clothing for women; and classes in numerous phases of homemaking. A Veterans High School Center with accelerated programs of study in many vocational specializations operates in four buildings between 3:30 and 9:30 p.m.

Some of Washington's working people as they vacate offices at the end of the business day. The District's vocational program is geared to their needs.

The District of Columbia has enjoyed the benefit of federal grants-in-aid for vocational education since the passage of the George-Deen Act in 1936. The District had not been included in earlier legislation.

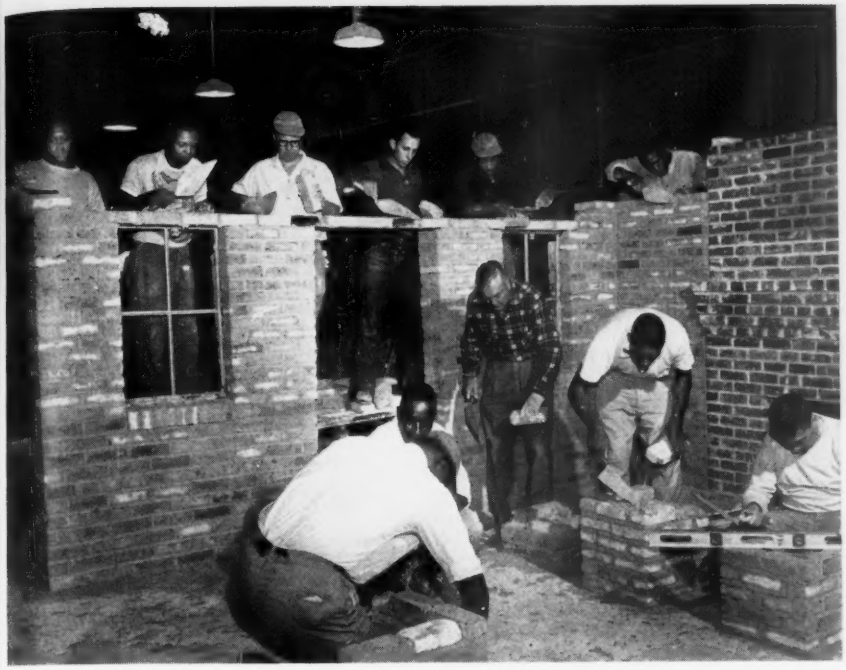
The T and I Area Is Active

Trade and industrial education in the District of Columbia was initiated in September, 1875, by a small group of earnest, far-sighted, enthusiastic teachers who recognized the need for rounding out the school experiences of students by including opportunity for manual expression. In this first experiment with practical arts in education, a class of 25 pupils meeting for two hours once a week enjoyed such success that by 1888 a three-story building devoted entirely to manual training was opened. Even at this early stage, variable factors in the industrial world soon made it necessary to revamp the program to meet changing industrial needs. The apprenticeship method of teaching gave way to a program which provided academic and scientific training along with shop work. The turn of the century saw these early efforts gathered into two new manual training high schools.

Actually these two schools became known later as technical high schools and it was more than ten years later that the permanent system of vocational high schools began to evolve. They had humble beginnings, with some uncertainty as to their grade level, but finally emerged in 1944 as vocational high schools. They have steadily established their identity as schools for able young people with special aptitudes and abilities, rather than for defective or disabled youth, which latter, nevertheless, deserve proper educational services.

The specialized unit trade training became so popular that more adequate plant and equipment were progressively provided. Additions are in the planning stage for two of the five present vocational high school buildings. The entire programs of these schools, both day and evening, are devoted to vocational education. Phelps and Bell enroll only boys, Burdick, girls, and Chamberlain and Washington, both boys and girls.

The trade and industrial education curriculum is organized to follow as closely as possible changes in technology, changes in the standards of industry, and changes in the needs of the worker. The selection of students is based upon interest, aptitude, general ability, and personal fitness. In June, 1955, screening tests were given to 1,100 applicants.



The nation's capital has a building program that is staggering in its size and expenditures. Vocational school programs in D. C. serve well its growing needs by increasing offerings in carpentry, brickmasonry, sheet metal work, plumbing, electrical work and architectural and engineering drafting. At left adult enrollees work on a brickmasonry project. Below, one of the best equipped shops in D. C.'s vocational high schools is the watch repair unit. Here the boys learn the intricate and precise operations that are necessary for success in a well paying career where demand exceeds the supply of workers. The District of Columbia's trade and industrial offerings in five high schools have the close cooperation and support of labor, management, civic and governmental groups in the capital.

A quick look at some of the occupational areas served offers an indication of the activity of the program. Courses in cosmetology and barbering are unable to meet the demands for workers. Both of these trades must be taught in their entirety because graduates of the courses enter the trade as fully trained, licensed workers.

The courses in practical nursing, started in 1945, have graduated and placed over 500 persons. When a supplementary program for upgrading practicing practical nurses was inaugurated in September 1955, approximately 900 sought admission. Now five local hospitals provide clinical educational experiences for the practical nursing students.

The District of Columbia's largest single industry—printing—offers numerous opportunities for those trained in any phase of the graphic arts. There are constant requests for photo-lithographers.

In the last decade, the large building program in the District has justified the expansion of training in carpentry, brickmasonry, sheet metal work, plumbing, electrical work, and architectural and engineering drafting. The most significant program, enrollment-wise, for training in this field is operated in the evening for apprentices and journeymen. In the course of a year, about 2,000 students are serviced in these and related trade areas.

The practical-nursing upgrade class at Washington Vocational High School draws an interested attendance. More than 500 persons have graduated from D. C.'s practical nursing program since 1945 when it opened. Five local hospitals provide clinical experiences for students who are enrolled in the program.

These represent but a few occupational areas chosen at random for comment. The progressive success of the total program of trade and industrial education is testimony to the high degree of cooperation enjoyed from advisory committees, local employment agencies, labor, management, and the citizens of the community.

Homemaking Education Is Widespread

The scope of the program in homemaking in the Washington schools is broad. Home economics is offered in the 11 senior high schools, the two vocational high schools for girls, and the 23 junior high schools. Compulsory courses are scheduled in the 7th and 8th grades, and opportunity is provided for electives in the 9th grade. The Health School and the occupational classes also offer home economics work for both boys and girls.

A recent survey of equipment in the schools by the home economics department is part of a program to bring facilities up-to-date for all phases of homemaking.

The program goals for 1955 were the improvement of instruction on the junior high school level through the use of a new homemaking guide; the expansion of offerings at the senior high school level; and a family centered program for every level. A committee of senior high school teachers is working on a similar guide for the 10th, 11th and 12th grades. With the valuable assistance of Dr. Margaret Alexander, Program Specialist, U. S. Office of Education, evaluation of this new curriculum material is planned for next year.

There are 11 centers for adult homemaking activities, three of which are located in Community and Neighborhood Houses. Over 1,524 men and women are now enrolled in classes in child-study, elementary clothing construction, foods and nutrition, making slipcovers and lampshades, reupholstery, modern cooking, home catering, family relationships, millinery, home crafts, dressmaking, and tailoring. Adults of all ages attend the classes and waiting lists are maintained for practically all courses.

The basic plan for adult homemaking recognizes the importance of home and family life in encouraging right attitudes and behavior on the part of all family members, and in educating for democratic practices in all aspects of living. Students are required to evaluate their progress periodically in relation to other members of the group. Group relationships are also stressed in sharing equipment, in individual behavior, and in general classroom and community activities.

The staff of the home economics department has an increased appreciation for the outcomes and integrating effect of curriculum units in good family relationships. We believe that any city will discover that community relationships are an extension of those learned and practiced in the family.

Home economics is offered in D. C.'s 11 senior high schools, the two vocational high schools for girls and the 23 junior high schools. Currently all of the equipment is being studied in an effort to bring all of the homemaking facilities up-to-date.

Roberta Butler—see page 13

Business training is a practical and popular vocational offering in D. C.

Distributive education has been a part of D. C.'s vocational program for many years because Washington's largest major area of employment (apart from the federal government) is in the distributive occupations.

Business and Distributive Education Are Popular

The program of business education in the public schools of Washington has been given emphasis since the first courses were offered in penmanship, bookkeeping and commercial law in the 1870's. Shorthand, typewriting, retailing, office machines, and many other related courses were added as time went on. The establishment of complete Business High Schools in 1890, 1901, and 1928, placed Washington in the forefront of American cities responding to the increasing demand for this kind of education.

The demand for office and service workers, workers in retail and wholesale trade, and independent business operatives has been sustained as the capital has faced expanding governmental operations, especially during the periods of the New Deal, World War II, post-war readjustment, and the Korean War. A steady supply of trained office workers has been required far beyond the capacity of local sources. Concomitant business services which attach themselves to governmental activities, the ensuing consumer demand for workers in material goods and services, and the concentration in Washington of many national organizations, have joined to keep business education practical and popular.

At present, business education courses are offered in the 11 comprehensive high schools, three of the vocational high schools, the Capitol Page School, three evening high schools, and 23 junior high schools. There is one city-wide program for adults in distributive education. A total of 180 teachers of business education are employed overall.

The junior high schools offer courses in basic typewriting, general business, business arithmetic, and the fundamentals of business. The vocational and comprehensive high schools provide business studies in four major vocational fields, namely, stenography, bookkeeping, retailing, and general clerical typist. The work has two purposes: to guide students who are planning business careers into occupations for which they are best suited, and to provide intensified training in that field; and to give students not selecting a business career an opportunity to elect business courses in which they may be interested on the high school level.

In Washington, the largest major area of employment, apart from the federal government, is in the distributive occupations. For this reason, distributive education programs have been offered not only since the passage of the George-Deen Act in 1936, but for many years before. The cooperative work-study plan made possible by the George-Deen and George-Barden Acts, is now in operation. Students spend a half day in school and work in the afternoons for a minimum of 15 hours a week in paid employment in a supervised job in the distributive occupations. Some of these programs are reimbursed and others are on a non-reimbursed basis in the nine high schools in which they operate. Some of the high schools are also operating this plan for the office occupations. Care is exercised in the selection and placement of students, with enrollments restricted to those who demonstrate suitable personal qualifications and aptitudes and a genuine interest in distributive occupations. At present, this plan is limited to high school seniors. They are encouraged to enter employment where future advancement and a permanent career are assured.

The evening high schools offer courses in business education in three buildings. There is a heavy demand for shorthand, typewriting, bookkeeping, secretarial practice, business English and office machines. The enrollment is large and includes many office workers who wish to improve skills or learn new ones for promotional opportunities. A high school diploma is granted that is the equivalent of the diploma earned in the day schools.

The extensive program for adults in distributive education is spread over the city. Many of the courses are conducted on the premises of business organizations and associations, and include such work as the following: Insurance, Management and Sales; Real Estate, Management and Sales; Management Problems, Small Business; Textile Information Clinics; Problems in Beauty Parlor Operation; Record Keeping for Small Businesses; Grocery Store Operation; Retail Salesmanship; Advertising and Sales Promotion; Junior Executive Training; Filling Station Operation; and Credit Problems.

To single out one feature of the program for comment, Washington is proud of its system of school banks, which operate as real banking institutions under the authority of the Board of Education and the Comptroller of Currency. These banks have operated since 1911, successfully teaching thrift habits and supplying controlled practical banking experiences to business students. Resources are invested in government bonds and shares in local savings and loan associations.

Students working in the banks receive half a credit for one hour of work in the bank daily for one semester. They are carefully selected for this work from the best of the bookkeeping students and are covered by a blanket fidelity bond. These banks pay interest to depositors, receive payments for public utility bills, cash checks, sell street car tickets, handle sales of tickets to all school events, act as fiscal agent and depository for all school activities and funds, and receive the deposits of students for savings. All deposits are insured by the Federal Deposit Insurance Corporation. The banks are

audited annually by a committee of outside examiners under regulations of the Board of Education. Each bank is supervised by a bank manager, who is usually a teacher of bookkeeping, and an advisory board which consists of the manager, the assistant manager, a faculty adviser and the principal. The banks are directly responsible to the Board of Education through the Superintendent of Schools and the Supervising Director of Business Education. One of these banks handles over $200,000 a year, has deposits of over $30,000, and investments of over $15,000. The bank managers have developed an excellent manual of procedure which might be helpful to others planning to operate school banking institutions.

There were 7,274 students enrolled in business education courses in the senior high schools in June 1955. Seventy-five per cent of all students enrolled in high school in Washington take one or more business education courses. This is an index of the popularity of business education in the District of Columbia public schools.

75 per cent of high school youths in D. C. study one or more business subjects.

Farm Program In the City

Of more than passing interest to other city communities may be the modest experiment in vocational agriculture which was introduced in the Washington public schools in 1942. The program was started at a time when circumstances were peculiarly favorable to this admitted innovation in the vocational program of a highly urbanized community. Fifteen years ago there was extensive free land in the immediate environs of Washington and the children of persons either employed in D. C. or paying city taxes could attend the public schools tuition-free. At this time also, the food production and conservation program of World War II was in full swing and victory gardens were promoted wherever land was available. But most forunate was the availability of a 22-acre plot of land suitable for farming almost within a stone's throw of one of the vocational high schools. This land was an island dredged from the bottom of the Anacostia River and consisting of rich alluvium. It was accessible from a highway bridge.

Interested students "farm in the city" through the services of the D. C. vo-ag program. For 15 years boys have worked land on an island provided for training in vegetable production, small fruit growing, ornamental horticulture, poultry production, and farm mechanics. Current offerings are limited by available farm land.

The course of study has included vegetable production, small fruit growing, ornamental horticulture, poultry production, and farm mechanics. In addition to the farm land, the physical plant was comprised of a poultry house for broiler production, a cannery, a farm shop, and a greenhouse. Two tractors and the necessary implements for cultivation were provided.

The day program enrolled its limit of students and the evening adult classes in vegetable production had 275 persons enrolled whose gardens covered 18 acres. The cannery was in constant use. The program met the standards for subsidized vocational agriculture and made the District of Columbia eligible for $40,000 of federal funds on a minimum-provision basis.

The students worked the truck gardens on a cooperative basis, sharing the experiences of production, harvesting and sale of crops. The poultry projects were similarly handled. The graduates have found ready employment in various small animal units as caretakers, in research divisions of hospitals, in the park service and in the nursery and greenhouse industry around Washington. Some have returned to former farm homes in Virginia, Maryland, and North Carolina.

As may have been expected, the program has been gradually bricked-in by residential expansion of the metropolitan area of Washington. Former suburban open lands are now thickly populated communities. All students living outside the city limits are required to pay tuition. The National Capital Parks has repossessed our island for expansion of one of its golf courses. Available farm land is reduced to six acres, provided through the generosity of Gallaudet College, which incidentally, is the only collegiate level institution for the deaf in the world—another unique Washington resource. This combination of circumstances has led to the decision to wtihdraw from the subsidized vocational program and limit the day program to the trade and industrial area of ornamental horticulture including landscape gardening, because of the favorable labor market for this kind of worker. The evening program in vegetable production will be continued as long as the demand exists. At present the evening course has an enrollment of 45.

All through the course of this experiment D. C. has enjoyed the benefit of helpful and sympathetic cooperation from the U. S. Office of Education, the Park Service, and even the Fire Department in times of drought. The experience has been fruitful and the program has met a need over the past 14 years. The present recommendation for modification is aimed at keeping in phase with need.

Industrial Arts For All

Nowhere, in our opinion, is there a clearer statement of the place of industrial arts in free public education than in the AVA publication, *A Guide to Improving Instruction in Industrial Arts.* The program in the District's public schools accepts the philosophy that industrial arts education is "a part of general education because it derives its content from industry—a basic element of our culture—and because it has as its social purpose the greater understanding and better control of the phenomena of industry."

The program operates on both the elementary and secondary levels. At present the work in the elementary schools functions as an important part of the curriculum for retarded students. Insofar as possible, the classroom teachers in the elementary schools provide experiences in this area for their pupils. It is agreed that the latter phase is deserving of reinforcement when resources permit. Three school centers for boys' work have been established to meet the needs of retarded pupils.

On the junior high level, all 23 junior high schools include industrial arts in their curriculum. Unit shops include drawing, electricity, metal craft, printing, shoe repair and woodwork. Some of the schools also have general shops. Three semesters of shop work are required of all students. Three additional semesters of shop may be elected by a pupil with the approval of the counsellor. Many real projects are used in the course of instruction, such as the construction of items for the American Red Cross for use in hospitals and participation of students in craftsmanship contests.

On the senior high level all the courses in industrial arts are on an elective basis. Shops are available in each of the 11 senior high schools. Although the work is recognized as a phase of general education it is nevertheless true that many of the graduates of the comprehensive high schools obtain initial employment by virtue of some particular specialization in these courses. On this level also, individual projects are encouraged and in addition to those on the junior high level many students enter the home builders competition in house-design either with architectural drawings or scale models of homes.

The 137 teachers of industrial arts in the Washington schools are enthusiastic in the belief that their work is contributing substantially to the adjustment of young people in a civilization that is characterized by highly technical industrialization.

Many Help In Guidance

Since its organization in 1941, the Department of Guidance and Placement has operated on a city-wide basis to meet the needs of all pupils. The fact that it is not concerned solely with vocational placement has introduced the usual problem in taking advantage of federal funds.

The general aim of the guidance program is to help each pupil achieve the highest level of educational, vocational and personal development of which he is capable. The Department has attempted to develop an awareness on the part of each counsellor and teacher of his own part in promoting the achievement and adjustment of pupils. The vocational guidance phase of the program includes occupational information, counselling, research, job placement, and follow-up. In assaying the interests, aptitudes and general abilities of pupils, use is made of the resources of the Department of Pupil

Industrial arts students who were first prize winners in D. C.'s 1955 lamp contest, sponsored by the Potomac Electric Power Co., line up to display their products

Boys, as well as girls, take advantage of the District's fine programs in homemaking education. Below, students learn more about the preparation of family meals in a class which, like the entire home economics program, stresses the needs of families. At bottom is shown one of the local, weekly television programs in Washington, D. C. Here Principal Reed of Chamberlain Vocational High School stars in a show with practical arts as the central theme.

Appraisal, Study and Attendance. The machinery of the Department of Guidance, including its cooperative function with the Research Department in aptitude testing, is depended upon for the selection of students entering the vocational high schools.

The guidance personnel consist of two counsellors in each senior high school and one in each of the five vocational and 23 junior high schools. The central staff is composed of the Supervising Director and a coordinator for the placement program. In the vocational high schools a large share of the placement job is accomplished through the instructors because of their familiarity with the people, establishments, standards and procedures in their respective trade areas. In this phase of the program there seems to be no adequate substitute for the touch of a trade teacher who enjoys the full confidence of industry.

Another phenomenon in the area of guidance of which our vocational educators are keenly aware, is the strong influence of all teachers on the educational and occupational choices of students. The obvious implication is that all teachers on all levels need enlightened and unbiased points of view in relation to the world of work. A continuous program in the general field of public relations, both internally and externally, may be part of the answer in persuading teachers, parents and the community in general to place proper values on all aspects of public education.

Two Into One

Among the assets of vocational education in Washington must be counted the professional organizations of teachers in affiliation with the AVA. Because of the historically dual nature of its schools system, the District of Columbia has had two of

Ella P. Moran, President, National Capital Vocational Association, and Daniel S. Martin, President, District of Columbia Vocational Association.

almost everything, including vocational associations: The District of Columbia Vocational Association founded in 1926, and the National Capital Vocational Association organized in 1939. The two associations are now in the process of merging, and the resulting organization should be even stronger because of its inheritance of the best from the two programs and traditions.

Too generous words of praise could not be spoken for the corps of able and dedicated teachers in vocational education who daily give a full measure of service to the hundreds of pupils enrolled in their classes.

And for These We Exist

Behind our interests in buildings, equipment and supplies, which are but the tools and trappings of our business, lies an abiding concern for the people who are served. We can think of no more fitting benediction to this little exposition of vocational education in the District of Columbia than to present five typical graduates who have found happiness and success in their chosen occupational areas by virtue of their training in the vocational high schools of Washington. These justify our existence.

Judith Magnotta

Judith Magnotto, 1951 graduate of Chamberlain Vocational High School has wide responsibility in her position in charge of advertising layout for Lansburgh's Department Store of Washington. She comments that her training at Chamberlain gave her basic preparation not only in fine art but also in the practical application of art to commerce. In addition to her career, she found her husband at Chamberlain. Mr. Antonio Magnotto, a 1953 business graduate, is employed in his field at the Washington Gas Light Company.

Walter Trunnel, 1936 graduate of Bell Vocational High School, operates his own electrical business in Bethesda, Maryland. He and his family live on a forty-five acre estate in Bethesda and have a summer home in Rhinelander, Wisconsin. He has been president of the Electrical Contractors Association of both Maryland and the District of Columbia. He urges all boys "to consider the skilled mechanics fields and to take full advantage of the excellent training opportunities available."

Walter Trunnel

Leonard P. Hunt

Leonard P. Hunt, 1948 graduate of the Phelps Vocational High School, is employed as a lithographic draftsman at the United States Naval Hydrographic Office, Suitland, Maryland. He says, "there is nothing more important to a person than getting into work he can do well and enjoys. Good pay helps too. My training at Phelps made it possible for me to reach this objective."

Beatrice J. Plowden

Mrs. Beatrice J. Plowden completed the course in Practical Nursing, M. M. Washington Vocational High School, in December, 1949. She has served as President of the Practical Nurses Alumae.

After working as a practical nurse at D. C. General Hospital for several years, she has completed tours of duty at the Mount Edgecombe Medical Center and the Bethel Native Hospital, both in Alaska.

Roberta Butler

Roberta Butler, a 1954 graduate of the Burdick Vocational High School, is employed as a secretary in the office of Assistant Superintendent of Schools, Thomas J. Holmes. See photo, page 9.

Mr. Holmes says: "Miss Roberta Butler came to this office from a vocational high school thoroughly trained in all the tool subjects required of a person in a secretarial position."

Francis Gregory, D. C. Vocational Director, Says

If there are misgivings over the degree to which secondary education is meeting the needs of our youth and society, a modest disclaimer of partnership in this uncertainty can be filed by vocational education. In this field the relationship between objectives and program is rather clear and the objectives still seem to fit in our highly industrial culture.

Vocational education chooses to recognize the objectives of productive citizenship as the one most apt to entrain the others. It is not unreasonable to assume that the average youth's dominant quest is for occupational competence and security, and that in that search he will acquire many things essential to the wholeness of his life. The curriculum of the vocational school is designed to promote such integration of personality.

This may do violence to a more leisurely philosophy which would remove from secondary education the entire burden of specialization, to leave the way clear for general development. Vocational education, frankly, finds this somewhat unrealistic and inquires about the occupational adjustment of the student from such a program for whom high school is the last formal educational experience.

In reference to serving the ends of society, the optimum development of a nation's skilled manpower is basic to its economy, its community and family relationships, and its security. Any denial or waste threatens all three. With the integration and accompanying reorganization of the Washington public schools, it has been gratifying to measure gains in the elimination of duplication.

Industrial arts teachers —when Monday morning comes here's a complete unit on—

CERAMICS

Top photos — examples of ceramic projects. Above, a stone was used as a natural form for this clay form.

AN INTRODUCTION to ceramics activities in a general shop program may go something like this:

"Next week we are going to try something new in our shop program. I think you are going to like it. I know that most of you have seen the projects in the display room which have been made of clay. Those projects are ceramic. They were hand modeled by the students. That is one small part of ceramics. The word ceramics takes in a large field of products such as glass, brick, tile, dishes and insulators. Many of the stoves, sinks, and refrigerators in your homes are made of porcelain or porcelain coated iron. These are truly ceramic. Anything made from an earthy material and fired to a red heat is ceramics. Metal? No, metals are not ceramics, but they play a large part in the ceramic industry. All of our ceramic colors come from metalic oxides. Blue comes from cobalt, brown comes from iron, and green from copper.

"In our unit on ceramics we are going to see how many of these products are made. We are going to make some right here in our shop."

To arouse even greater interest ask if any of the students know of local clay deposits. It will probably surprise you to learn that most of them can bring you in some clay samples. By all means have them bring in local clay. This can play a part in your unit later on. Put the clay aside properly labeled. When it becomes dry it can be crushed, sieved and mixed with water to make a casting clay or used for modeling. If the local clay is relatively free of foreign matter it may be used as is. This, however, is unusual. Compare the clay with the prepared body which you already have in your shop. This is a good time to teach clay composition.

A good beginning project is making clay dishes over stones. Ask each student to bring in some smooth stones. Have them look along creek or river beds or along a lake shore. These will be used for forms.

Monday morning:—several of your students have brought in stones. One student has a whole box full, almost enough for the whole class. Others have forgotten. You had better have some spares yourself just in case.

"Today we are going to be mud daubers, not the original mud daubers but modern mud daubers. When adults do it in evening classes they call themselves mudhens. Beauty experts advise mud (clay) packs as beauty treatment, but that doesn't mean that you folks need to get all covered with clay. Be sure you have your apron on and use plenty of newspaper on the tables. We are going to make some naturally shaped dishes over the stones which you brought in. The stones will act as natural forms for our clay pieces. Each of you should use one stone for your first trial. Do not choose too large a stone for your first attempt. You will be allowed to do others later."

Have on hand the following items: enough rolling pins or dowel rods so each student may have one, several fettling knives, a few pieces of ¼ inch plywood strips for thickness guides, and a few fine grain sponges (elephant ear).

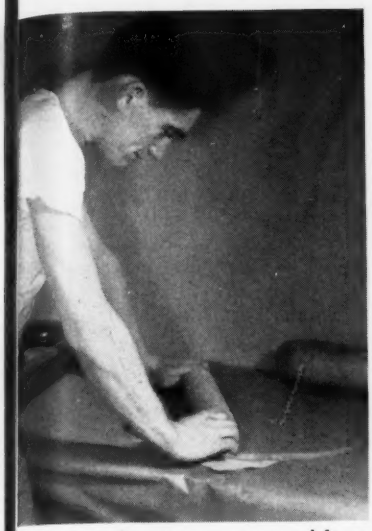
Demonstrate the rolling out of the clay. If the clay which you are using has not been through a pug mill, you will have to wedge it thoroughly before trying to roll it out. Flatten it first with the heel of the hand. If air pockets appear as you are rolling, let them out by piercing them with your knife. When this is rolled to the proper thickness cover it with a damp cloth until you are ready to use it. Now help the students roll out their clay slabs. Be sure they have several thicknesses of newspaper on the benches. Note: the back side of oil cloth is better than newspaper for rolling out clay because it will not stick to the clay and will not let the moisture through to your table tops. Turn the slab occasionally to get it very smooth. If the dowel rods become wet as the students roll, have them dried off with a paper towel or a dry cloth. Emphasize cleanliness throughout.

When all clay is rolled to the proper thickness demonstrate forming the clay over the stones. Let the students form their dishes. Work slowly and carefully. Coax the clay around the stone. Smooth down the

---

By VERNON D. SEELEY

Mr. Seeley, an industrial arts teacher in Oneonta, N. Y., was asked to prepare this contribution to the IAPPC series—*when Monday morning comes*—by Dr. Roy G. Fales, Chief, Industrial Arts Bureau, New York State Education Department. Dr. Fales selected Mr. Seeley for this assignment because of his outstanding work in the field.



Above, use of a stone as a natural form. A student carefully rolls out his clay on the back of a piece of oil cloth. He remembers to turn his slab occassionally.

clay with the knife and the sponge. Show them that it is much easier to smooth out the cracks and bumps now than after the clay has hardened. Cut off the excess clay from the top. After the edges have been carefully smoothed the pieces are allowed partially to dry.

"What happens to the clay as it dries? It becomes hard, yes, and it also shrinks. What would happen if we left the clay on the stones all night? That is right—by morning they would have large cracks in them. Therefore, we must make arrangements to remove the clay before it becomes too dry." Have some volunteers come in at noon or after school to help remove the clay dishes.

During the next few class periods these dishes may be smoothed with sponge, knife or sandpaper. It is important that the students use great care in smoothing up the greenware pieces. They are quite fargile and will not stand rough treatment. Be sure they are very smooth. If they are carefully smoothed and polished, they will be much better in the finished state.

When thoroughly dry the pieces may be bisque fired. They can be ready for firing in a few days if they are kept in a dry place. Do not rush the firing as the piece may blow in the heat of the kiln, if it is not thoroughly dry. This blowing is caused by the steam created in the moist clay as the piece becomes hot.

Now is a good time to bring in related information on kilns. Obtain pictures and information on various types of commercial kilns. These may be obtained from books, trade magazines or from commercial potteries. Of necessity, the shop kiln is quite small but the same firing procedures and temperatures are used. Show how the heat of the kiln is checked by use of pyrometric cones and by the pyrometer. I like to show the class how a pyrometer works by holding a lighted match under the thermocouple. These two small pieces of wire of different metal are able to create a weak current of electricity when heated. The students will be surprised at the degree of heat generated from the match flame.

A good outside assignment now is to have the students bring in a list of as many ceramic objects as possible. You will probably have several which are debatable. Cement products are some that are often classed as ceramics, but are not truly ceramic. Plastic items often are misnamed as ceramic.

If the students are in the room as the kiln approaches maturing heat, be sure to have them watch the deforming of the cones. Make comparing notes with the reading on the pyrometer. As a safety precaution do not let them get too close to the peep hole. There is a terrific amount of heat inside the kiln, and if you get too close to the peep hole while looking there is danger of scorching your eyebrows.

When the kiln has cooled properly the bisque pieces may be removed. Make a few tests on these bisque fired pieces. Test them for hardness, try sanding or filing. See if they will hold water. They probably will not leak, but water will soak through them. This fact is true of our clay flower pots. How can we make them waterproof? How can we color them? A glaze or glass covering is the answer. The pieces are now ready to be glazed. There are many books on glazing. It can be very simple or it may become quite complicated. Briefly explain the ingredients of a glaze. Point out the similarity of glaze and clay. (This can be quite easily demonstrated by using a little flux in a clay slip and applying the slip to a bisque piece. Fire this piece and notice the glossy appearance of the surface.)

On the first projects I have found it best to use a good commercial glaze which can be brushed on. Later experiment with your own glazes and colors. Stress putting on a heavy coat of glaze. A coating of 1/32 to 1/16 of an inch should be sufficient. More failures in finished pieces are due to lack of glaze than all other failures combined. Allow each coat to dry thoroughly before applying the next coat.

The glazed pieces may be fired immediately as there is very little danger of blowing in the glost fire. Be sure the pieces are well separated in the kiln and that each piece is properly supported by stilts. This glost firing takes about the same temperature as the bisque firing.

The opening of the glost kiln is a great moment for the students. Be sure they are on hand when you open it the first time. The transformation that has taken place in the heat of the kiln is miraculous.

From this point you can go into mold making, slip casting, or hand modeling processes. You may want to include copper enameling which is recently becoming very popular.

When You're Working on Ceramics . . .

Obtain as many reference books on ceramics as possible.

Handle all ceramic pieces with extreme care.

Experiment freely with clay, glaze and color. Keep an accurate record of all experiments.

Allow for freedom of choice in projects once the basic skills have been taught.

Be careful not to get cut on the chipped glaze or stilt marks. (These should be carefully ground off when the piece is taken from the kiln.)

Do not get glaze into the mouth, either from your hands or from brushes. Most glazes contain lead, which is poison.

Encourage cooperation with the art department. They can help with design and color.

Do not become discouraged over failures. You will have some, but you will have good pieces, too.

Emphasize cleanliness from the start. Ceramics can become messy and dirty, but this need not be so if care is taken.

Keep all clays and glazes carefully labelled to prevent errors.

Our Changing Society

creates new philosophies for home economics education

WHAT CHANGES HAVE taken place in our society in the past generation or so, and how do these changes affect our programs? It is obvious to anyone who works with individuals, with social groups, or with families that many of the old formulas do not fit. In re-thinking our policies and problems, what facts of modern life should be taken into consideration?

Changes in American living present problems for teachers which press for an answer. I hope to bring you a basis for orientation of your thinking, as you try to find the answers, by discussing ten changes that have come about in our time.

Changing Philosophy. The idea of educating people to make a good family and a good home is indeed new. Family life education is taught in an increasing number of our schools, for the purpose of teaching students the principles of successful family living. Family life education is moving away from a study of "things"—such as cooking and sewing – toward a functional, person-centered approach and a dynamic study of family relationships.

We no longer believe that all people are endowed with natural capacities for creating successful families. We no longer believe that families should be let alone to work out their problems, sink or swim. And further, we are looking at family, school, community, church and the other institutions which surround an individual as inter-related and co-responsible.

Our changing philosophy might be stated somewhat as follows: Chance and biological determinism, bolstered by moral epigrams, play a decreasing role in the explanation of human behavior; education in the nature of social relationships, supported by scientific study, plays an increasing role.

Changes in Numbers of People. The demographers tell us that the growth in the U. S. population has been phenomenal. It is hard to understand what a population of 165 million people means. One hundred years ago, there were 23 million people in the country, or about the same number as are today classified as our rural farm population. At the time of the first census in 1790, there were about five persons per square mile; today the average density is 51 persons. Rhode Island, our most densely populated state, has 748 persons per square mile; and northern New Jersey has as high as 19,000.

Changes in the Distribution of People. While the country's population as a whole increased 14.5 per cent from 1940 to 1950, there was a decrease of 23.6 per cent in the farm population and an increase of 43.2 per cent in the rural non-farm population. The great increases were in the urban areas, not the central cities themselves but in the areas surrounding the cities.

Clearly, as people move city-ward, the city moves outward. There is no such thing as the isolation of country people from city influences or the isolation of city people from rural influences. Country and city seem to be coming together in the fringes, and it looks as if we might develop a new pattern of living in which we can make use of both city and country advantages, without the disadvantages formerly associated with either. Let it be clear, however, that the citizens of these new communities live an urban way of life and are related to each other in an urban setting.

To complicate matters in these new communities, the old geographic lines drawn on a map some 100 or 200 years ago have less and less meaning. What has more meaning is the way people are functionally organized, and this functional organization cuts across or often deletes old political sub-divisions. A family may live in one place, work in another, send the child to school in another, and attend church in another, especially as rapid transit and express highways develop. City lines, township lines, and even state lines, and the overlapping and competing authorities associated with each, today seem more of a hindrance than a help in solving community problems.

It is apparent that changes in the distribution of people mean more than the crowding of people into a constricted space. It also means a change in the character of the community. Only 25 years ago the country as a whole was 56.2 per cent urban and 43.8 per cent rural. Today the country as a whole is 64 per cent urban and 36 per cent rural. But of this 36 per cent, only about 15 per cent actually lives on farms.

Changes in the distribution of people means that people move about. About 20 per cent of the U.S. poplation changed residence from 1949 to 1950.

There are some 38 million families in the country today, which is an all-time high. But the family group is smaller. When the first census was taken, the average family contained 5.7 persons. Today, the average family has 3.6 persons. It is likely that the small family is here to stay, even though we have recently gone through a 12-year boom in birth rates.

Changes in Age and Sex Ratios. The aging of our population is one of its major characteristics. Between 1940 and 1950, the country's population of those 67 years of age and over went up 36 per cent.

Women outnumber men in this age group and more than half the women are widows. The fact that women live longer than men, and the fact also that the 1950 Census is the first to show an excess of females

---

By HELEN G. HURD

Dr. Hurd is Dean of Students and Chairman of the Department of Sociology at Rutgers University College, New Brunswick, N. J. This article contains excerpts from her speech presented to the Home Economics Division of the AVA at the Atlantic City Convention, Dec. 7, 1955.

over males—about one quarter of a million more females than males—would indicate that this may not be a short-run phenomenon.

Changes in Material Equipment. As we face the atom and automation age, it is difficult to keep from our thoughts how far we have come in changes in communication, transportation and equipment. We are indeed tempted to believe that progress is our most important product. There is no doubt that modern technological advancement has had a great impact on our changing social organization, our family life and our social relationships.

The horse and buggy world was an easier world, lower in tempo, agrarian in nature and more secure in its beliefs. Life today is not simple, and the old either/or, black or white, yes or no answers do not fit. There is less and less margin for error, and a mistake today can be magnified into a whole series of dislocations. Our complex technology has meant that individual welfare becomes increasingly tied to the welfare of all, and the phrase "public interest" becomes increasingly important. Our mechanical and technological interdependence indeed reduces us all to brothers.

Changes in Education and Income. Closely related to our machine culture is the educational and income distribution of our modern population. According to the U.S. Office of Education latest estimate, one in every four Americans is attending school – about 39½ million. Our educational level is at an all-time high, increasing with each Census.

That a college education pays off in dollars is indicated by the 1950 Bureau of Census life income estimates for varying amounts of education. There is nearly $100,000 difference in life income between a high school and a college education.

The median income of the American people is also steadily rising. The income by families as reported in the 1950 Census gives $3,073 as the median income of the total population and about $200 higher for urban and rural non-farm families. Summarizing the data, about 27 per cent of the families has an income of $2,000 and under; 36 per cent from $2,000 to $4,000; 11 per cent from $4,000 to $6,000; 8 per cent from $6,000 to $10,000; 4 per cent, $10,000 and over; and 4 per cent not reporting.

In an economy which produces more and urges people to buy more, pays them more and urges them to demand more, consumption becomes a virtue. In the old days, a couple saved and if all went well, they were able to buy a home. Today, the family buys the home, the car, and the television and pays for them like rent. The 1909 family had $162.00 left after basic necessities were met and of this, they saved $51.00 for a rainy day. The 1950 family spends not only the $1,409 left after food, housing and clothing needs have been met, but an additional $286.00 from savings or borrowings. Thrift is no longer a virtue. How can parents teach children that a penny saved is a penny earned, and early to bed, early to rise, etc., when the family is $286.00 in debt to the installment company and doesn't go to bed until after the late, late show?

The important thing about education and income distribution is not in its emphasis on things, but in the attitudes and values which surround different levels of income and education. It is a mistake to assume that all people have the same attitudes and value systems that the relatively few have who are in the upper income brackets. People who are at lower levels in income and education might not see eye to eye with those who urge changes in their family practices. Not everyone in the community is in a position to follow leadership in what some people would consider "musts."

Changes in the Nature of Work and the Allocation of Time. Today, when a person comes in from a hard day's work at the office, the mill, the school, the chances are that he has not done much physical labor. He has tended intricate machinery, or he has tried to resolve problems of human relationships; he is worn out from making decisions and exhausted from being time-bound. Pressure is what tires us today.

We do more physical work in our leisure hours than we do in our working hours. The do-it-yourself interest is not to save money, but to give us something to do with our muscles and to give us problems to solve that are solvable.

The use of atomic energy and the more extensive use of machines that will control machines will serve only to multiply the decision-making and responsibility-assuming nature of work. It is no accident that heart disease and mental illness are now high in our population. We have not yet learned to make a new orientation to work and leisure. We recognize the burden of decision-making and responsibility on the men in high office, or in VIP jobs, but we have not yet recognized that most work today involves different strains and stresses than the physical labor of former years.

Changes in the Bases of Social Organization. Relationships, not things, are the key to human society today. The modern basis for social organization is increasing dependence and interdependence.

Modern man is tied to the modern social structure more through his membership in large impersonal organizations than by the older ties of family and community. We are developing a new form of associational living where we associate, not with relatives and close friends, but with strangers upon whom we are dependent. Interposed between the modern citizen and his relationships with other people are the rules and regulations of the institutions to which he is related. We function largely as representatives, and we deal with others as representatives. In fact, we are more closely associated with organizations and agencies than we are with people.

Changes in the Nature of Social Relationships. The movement away from the local intimate group as a basis of social organization, and the tendency toward increasing centralization into larger and more inclusive social organizations is the central theme in modern industrial society. Today, we look to large professional, industrial, vocational, and governmental organizations to give us information, protection, and status. It is these groups which give us wider horizons, and they also give us easier adaptability. This increasing centralization of functional organization has helped to offset the rootlessness of mobility.

Modern community organization is, in a functional sense, an extension of the family. Community problems today are the problems every family would face if they were acting independently – problems which each family once solved on an individual basis. While we have gone a long way in solving the organizational problems of a mobile society, we have not yet developed the psychological attitudes to enable people to live that way.

Changes in Life Orientation. The world we face today is a world with

a different basis of social organization, in both family and the community. Smaller and highly mobile families, whose way of life is based on consumption rather than thrift are welded together in large-scale organizations. Individuals serve as functionaries in these organizations, and they deal with other people not on the basis of face-to-face personal intimacy, but more impersonally, in terms of the rules and the regulations.

The old urban-dichotomy is no more; instead is a complex society of 165 million people, increasingly urbanized, facing a new social structure, with new sets of values emerging at each turn of the road—and yet each individual must steer his course as an individual and find his place. It is no wonder that we have so many people lost.

Let me now summarize briefly by raising some questions under the last topic.

1. A new philosophy underlies our approach—a philosophy that permits us to do things that 100 years ago would be considered none of our business. With this goes responsibility Are we sure that our staff is well-trained, well-informed, and that individual staff members have a broad vision? Do we need people trained in economics, psychology, political science, as well as home economics?

2. How are we preparing to meet the increasing population and more particularly increasing segments of population? Is there one homemaking teacher for a town of 1,000, and also one for a city of 10,000 people?

3. As we recognize the increasing urbanization of our society, and the change in orientation of the increasing number of non-rural families, are we prepared to re-orient our program? Are our planning groups and advisory committees concerned with the problems related to mobility, the suburban settlement patterns, the faster tempo of life, the greater centralization of groups and the national leadership of programs?

4. While we have reached a high peak in material prosperity, are there critical questions which could be asked in terms of some of the basic values – neighborliness, family life, independence, community pride, individual initiative? Do any of our programs raise the question of our inter-dependence and our related-ness to each other; our mutual responsibility and our mutual destiny? Do we assume that rural America is the last threshold of individualism, and do we, as individuals, view with alarm our increasing urbanism?

The country is rife with "viewers-with-alarm" who maintain that America is headed for disaster. They claim that we are about to lose or have already lost the individualism which we cherish; that the mass society spells the end of freedom and that increasing centralization of function means the beginning of the monolithic state. They view the machine as blotting out all culture; television will destroy reading, juke boxes will dull musical taste. They see in our crime and delinquency statistics the beginning of the end.

The best advice they can give us is to "go back" to some form of social organization that proved successful in the past—to some form of the large rural family, or to decentralize into small towns, or to the small business structure, or to independent and autonomous organizations with a minimum of central control

We cannot go back in social organization any more than we can go back to the horse and buggy and the coal oil lamp. The real problem is to develop our social organization and structures to a comparable degree of usefullness and vitality as our machine culture.

As the family becomes smaller in size, the relationships among the members become limited to fewer and fewer people and are thus intensified. If the family experience involves difficulties among the 3.6 persons, the impact upon each individual will be more intense than if there were many relatives around to help in the situation. The small family sends its members to outsiders, as teachers, doctors, psychiatrists, and marriage counsellors will attest. It also seeks practical help from outsiders—help in meal planning, home nursing, recreation, baby care, budgeting. The family focus is outward as it seeks to develop its inner stability, for there is no question but that the stability of the family has been shaken.

The change in family orientation from a producing family to a consuming family, the feeling of "roots" occasioned by living a long time in one place, all helped to keep families together in the past. The status a person once had ascribed to him because he was a member of a family long-established in the community no longer serves him and he must achieve whatever status he has for himself. Advanced education and success in business are the chief bestowers of status today, not who one's family was. And both require moving about.

Consumer education, family life education, and community relations should be given more attention. With this must be a recognition that there are still many low income group families, and families whose level of education precludes their complete understanding of externally-supplied programs and suggestions from outsiders.

6. How are we meeting the problems of urban America? These new urban communities in rural areas are not re-duplications of the old rural community. The way of life is different and the nature of relationships is different. The one-family house with the plot of ground is quite a change from the multiple dwelling in the heart of the city; it is also quite a change from the sparsely settled rural neighborhood of the past.

There is indication also that people will be brought into a greater participation in community affairs, and as they begin a problem analysis—whether problem be schools, sewerage, police protection or playgrounds, they will work with all the agencies and civic groups—health, welfare, education, church. Agricultural agencies will increasingly find themselves members of teams of cooperating agencies in working with parents and community groups.

7. Finally, today's family problems are basically social. They reflect a dual orientation. They reflect the necessity of relationships sustained with the outside world through work, school, church and community; and also an increasing degree of emotional reliance upon the three or four who comprise the inner circle of the family. People today, beginning with the teen-ager and earlier are members of more than one world. They are members of a family world and also of the world around them which is elaborating for them all the time, and which infringes on them constantly. We cannot separate these worlds. Nor should we.

136 men answer a question—

what do vo-ag teachers like best about their profession?

By VERNON B. SULTENFUSS and ARTHUR M. AHALT

SINCE THE BEGINNING of World War II, there has been a shortage of teachers of vocational agriculture in the United States. Large numbers of young men have trained for the profession and many have gone into it, but a goodly number have left teaching. A number of studies have been made in the past to determine why teachers have left the field. However, the authors found no studies that were made primarily to determine what teachers of vocational agriculture like about their profession.

SCOPE AND PROCEDURE

It was decided that only teachers in the North Atlantic Region would be contacted, since the authors are located in that Region, and it has certain characteristics not found in other Regions. Probably, many of the findings of this study would apply to all Regions.

Names of teachers to be surveyed were obtained from Supervisors of Vocational Agriculture of the 12 states in the North Atlantic Region. To obtain a sample of teachers whose responses would be based upon adequate knowledge of the job, only teachers having ten or more years of experience were selected.

After the teachers' names were obtained they were mailed a questionnaire which could be filled out mostly by checking. The teachers were not asked to sign their replies. From 179 questionnaires mailed, 136 (76 per cent) were returned. The average number of years of experience of teachers responding was 19, and the average number of positions held by them was 2.42. Almost three-fourths (72.8 per cent) indicated they expected to remain in teaching.

NATURE OF THE SURVEY QUESTIONNAIRE

To determine specific parts of the job that teachers liked, the activities of a teacher of vocational argriculture were divided into seven major groups with from 3 to 15 activities or items in each group. There was a total of 53 activities or items in all seven groups. The seven groups were: school officials, FFA Advisor, classroom duties, supervised farming, personal factors, administration of the department, and school duties other than teaching and personal factors.

In addition the teachers were asked questions about factors that might affect their decision to remain with, or to leave, teaching. These included questions on whether they intended to remain in teaching, whether they had ever been offered a better position, whether they taught out-of-school agricultural classes and how they liked them, whether they were active in a community organization, and whether they owned a farm or a business.

Teachers liked, by far, more activities than they disliked. The teachers were instructed to check only those activities or items for which they had a definite like or dislike. Of the 53 activities or items in the study 35 were liked by more than two-thirds of the teachers checking them, and 39 were liked by over half. All items in one major group, school officials, were liked by 92 per cent or more of the teachers checking them; in another area, advisor for the Future Farmers of America, all items were liked by 82 per cent or more. One individual activity, contact with farm people, was liked by all 136 teachers who replied; another activity, classroom teaching, was liked by all 134 who checked it.

The activities and items liked by two-thirds or more of the teachers checking them, listed by major groups and with the per cent that liked each, are as follows: SCHOOL OFFICIALS — Supervisor of vocational agriculture (98), general supervisor (96), principal (95), school board (93), superintendent (92)! FFA ADVISOR—Local chapter meetings (98), opening and closing meeting ceremonies (92), leadership conference (89), conventions and meetings (88), regional and state meetings (86); CLASSROOM DUTIES—Classroom teaching (100), field trips (96), length of school day (95), farm mechanics (92), length of classes (89), number of classes (86), teaching equipment (83), student interest (81), number of pupils (78), preparing course of study (72); SUPERVISED FARMING—Field work (99), supervising student projects (94); PERSONAL FACTORS—Contact with farm people (100), cooperative work (97) location (94), living conditions (93), tenure (86), security (85), retirement system (83), opportunity for professional improvement (83), twelve-month work (81), social prestige of teaching (70), length of work day (68); ADMINISTRATION OF DEPARTMENT—Planning (85), lesson planning (74).

LEAST LIKED ACTIVITIES OR ITEMS

Naturally, all activities were not liked more than they were disliked by the teachers, but those for which teachers showed little liking were relatively small in number. Of the 53 activities or items checked, 13 were liked by less than half of the teachers; only four were liked by less than one-third, as contrasted to 35 liked by more than two-thirds of the teachers.

School duties other than teaching were the least liked of the seven major groups of activities and items,

---

Mr. Sultenfuss is teacher of vocational agriculture in Centreville, Md. This article is summarized from his Master's Degree Thesis, completed at the University of Maryland in 1956, under Dr. Ahalt, Professor of Agricultural Education at the University of Maryland, College Park, Md.

with not one of the eight activities being liked by as many as two-thirds of the teachers checking them. It should be noted that many teachers apparently were not concerned with, or were neutral towards some of these activities, since they did not check them. The best liked items in this area were teachers' meetings and the PTA meetings.

The only other activities or items liked by less than half of the teachers checking them were opportunity for advancement and teaching classes other than vocational agriculture, liked by only 32 and 41 per cent respectively.

Student record keeping, record keeping for the department, and supervised farming reports and records were liked by only 53, 54, and 55 per cent, respectively, of the teachers checking them. This is probably to be expected, since record keeping by teachers and students are activities that have proven difficult to cope with over the years. That might mean that more appropriate and effective methods of keeping records should be devised, or it might mean that many teachers simply do not like record keeping.

The activities and items liked by less than two-thirds of the teachers checking them, again listed by major groups with the per cent that liked each, are as follows: SCHOOL DUTIES OTHER THAN TEACHING—Bus duties (20), cafeteria duties (22), hall duties (25), coaching dramatics (34), home room duties (37), coaching athletic teams (51), PTA meetings (57), teachers' meetings (65); ADMINISTRATION OF DEPARTMENT—Record keeping (54); PERSONAL FACTORS—Opportunity for advancement (32), opportunity for leisure time (47), salary (53), work load (61); SUPERVISED FARMING—Supervised farming reports and records (55), time available for supervision (57); CLASSROOM DUTIES—Teaching classes other than vo-ag (41), student record keeping (53), and student discipline (65).

OTHER FACTORS

Factors other than likes and dislikes often have a bearing on whether or not a teacher stays in the profession. The teachers surveyed were asked a number of questions to bring out the effect of such factors.

Of the 136 teachers responding, 87.5 per cent said they were staying in teaching because they liked it, 66.1 per cent indicated their salary had been increasing, 65.4 per cent owned their own home, and 42.6 per cent had family obligations which tended to keep them in their present location.

The teachers were asked if they had ever been offered a job outside of teaching at an increased salary or with other pronounced advantages. Of 123 answering this question, almost two-thirds (64.2 per cent) said they had. Most of the offers for other positions were in other agricultural or related occupations, with the largest number of offers being as feed salesmen (20) and as Agricultural Extension Service workers (11). A total of 16 kinds of jobs were listed as having been offered, but the largest number of times any other kind was mentioned was four. The most common reason teachers gave for rejecting such offers was that the job would have taken them away from home (17).

The teachers were asked if they taught out-of-scool classes, and about two-thirds (89 or 65.4 per cent) said they had. Furthermore, 82 per cent of those who taught such classes said they liked them. However, when asked to choose the best liked between the all-day, young farmer, and adult farmer classes, 56.1 per cent of those who taught out-of-school classes chose all-day classes.

Ties to communities are often gained through organizational work. Of the 136 teachers responding 89 (65.4 per cent) belonged to one or more civic, social or fraternal organizations, a total of 28 such organizations being listed. The largest number of organizations any teacher belonged to was six. The average number of organizations for all teachers was 1.7, and the average number for those teachers belonging to one or more organizations was 2.6.

Teachers sometimes own farms or businesses as an avocation. A total of 40 teachers (29.4 per cent) reported owning farms and a combined total of 50 (36.7 per cent) owned a farm or a business. A vast majority of these teachers (82 per cent) said the farm or business was a help to them in teaching while only a few (18 per cent) said it was a hindrance.

CONCLUSIONS

This study brings into clear focus what teachers of vocational agriculture like best about their profession and what they like least. To make the job as pleasant as possible, school administrators should emphasize a teacher's likes in his position. On the other hand it is the duty of a teacher to accept some activities he dislikes, and which probably are difficult to make likeable, as a necessary part of his job. If both accept this philosophy, the school atmosphere will be as wholesome as possible as far as vocational agriculture is concerned.

In light of this study the following are specifically recommended:

- Young farmer and adult farmer classes should be attempted by teachers and encouraged by administrators, since 82 per cent of teachers who taught them felt such classes helped keep them in teaching.
- Teachers should belong to one or more civic organizations to make adult contacts and to vary their work.
- Teachers should not be discouraged from owning a farm or business, since those who did felt it helped them.
- Teachers should be assigned extra school duties only when they can be performed during the school day to avoid interference with one of his most important activities, supervising student home farm programs.
- Classes other than vocational agriculture should be assigned to these teachers only in emergencies, as this was one of the least liked activities.
- This study shows that all phases of record keeping are not popular with teachers. For this reason continued attempts should be made to devise better record keeping systems. At the same time, teachers must realize that record keeping is generally not too well liked but necessary, and that they must do their share in recording and supplying information.

In addition to making current working conditions in the profession more pleasant, the findings of this study can be used by supervisors, teacher trainers, and teachers to recruit trainees for the profession and to encourage them to go into teaching when trained. Only when we emphasize the most likeable parts of the profession, and learn graciously to accept the less likeable parts while trying constantly to improve them, can an adequate force of fully qualified teachers be supplied and kept in the profession.

House approves full amount of George-Barden funds for vocational education

THE U. S. HOUSE OF REPRESENTATIVES approved for the first time, on March 3, 1956, the full amount authorized for vocational education in the George-Barden Act.

Congressman John Fogarty, (D.), R. I., Chairman of the Subcommittee that handles appropriations for the Departments of Labor and Health, Education and Welfare, in presenting the recommendation for the full amount on the floor of the House, said:

"As to the increases we made, the first one was in vocational education. We have had a great demand by Members of the Congress to increase the appropriation for vocational education up to the authorized amount of $29 million plus. So, the committee this year raised the budget request by $2,760,000 to bring it up to the authorized amount of $29 million plus, for vocational education grants.

"We find that this Government operation is working out to the advantage of the young people of this country and has been universally accepted. That is why we raised that item. . . ."

Presented here are excerpts from statements made in behalf of the full appropriation by some of those who supported the measure either on the floor of the House or at sessions of the Appropriations Committee.

Congressman George S. Long (D.), La.: "I would like to associate myself with the remarks of the gentleman [Fogarty] from Rhode Island and to compliment him on a job well done."

Congressman Carl D. Perkins, (D.) Ky.: "The approval of this increase will mean much to the future of the country."

Congressman Henderson Lanham, (D), Ga.: "In the field of education we have been successful in agreeing upon ever increasing appropriations for vocational education so vital in this day of technical and engineering advances when the need for skilled workers grows apace."

William G. Carr, Executive Secretary, National Education Association: "The 1957 Budget requests $26,500,000 for grants to the states for vocational education under the provisions of the George-Barden Act. In the past two fiscal years Congress has increased the George-Barden appropriations to approach more closely the full amount authorized by that Act. The increase has been made gradually to allow the states and their localities to match the additional federal funds and expand their programs accordingly. We believe the time has now come for Congress to appropriate the full amount of $29,300,000 authorized by the George-Barden Act. For this reason the Association in its Representative Assembly of July 1955 adopted the following resolution:

"The National Education Association urges the Congress to appropriate funds for vocational education up to the full amount authorized by existing legislation and to examine with great care any proposed legislation to modify the present program."

Hugh F. Hall, Legislative Assistant, American Farm Bureau Federation: "The vocational agriculture program has contributed much to the progress of American agriculture . . . We urge upon you the approval of the full authorization provided in the George-Barden Act for the coming year."

M. D. Mobley, Executive Secretary, AVA: "If we are to win the battle for the minds of men . . . we must never for a day slacken our efforts to increase and improve technical, scientific, and vocational training programs of all sorts at all levels."

J. F. Ingram, President, AVA: "Though great progress has been made in the development of a sound, effective program . . . there is still much to be done . . .

"Because of the support received from National Congress in the last two years, there is new enthusiasm among vocational teachers and officials everywhere."

Clyde T. Ellis, General Manager, National Rural Electric Cooperative Association: "This committee has always given sympathetic consideration to the need for job training and safety training funds to match the funds of the various states and local cooperatives in this program and we are very hopeful that the attitude of this committee will reflect itself in the present 84th Congress and make available the full $29,300,000."

A. E. Becker, Manager, Association of Illinois Electric Cooperatives: "We sincerely urge the House Subcommittee on Appropriations . . . to favorably consider recommending an appropriation of the full amount authorized under the George-Barden Act."

Ralph C. Raber, President, Indiana Farmers Union: "National Farmers Union is firmly convinced that increasing the appropriations up to the full authorization of $29.3 million will result in much greater participation by the federal, state and local units of government."

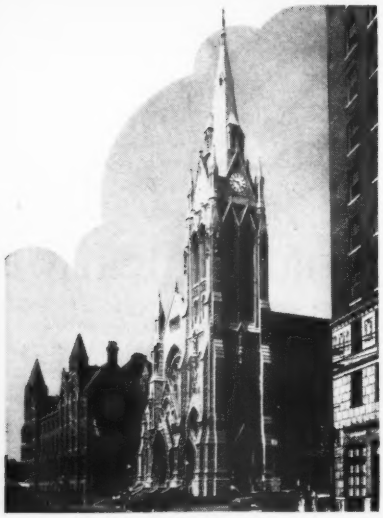
J. Albert Hopkins, President, Arkansas Farmers Union: "I urge that the appropriation for vocational education be increased to the maximum authorized. . . ."

Andrew J. Biemiller, Legislative Representative, AFL-CIO: "With so many new entrants into the labor force, and with the tremendous needs for skilled and semiskilled workers brought about by the changing technology, the vocational education program is more important than ever."

Congressman Thomas B. Curtis, (R.), Mo.: "The training that our young people get in the vocational field is not only significant in maintaining the economic strength of this country but also in our military strength."

See you in St. Louis!

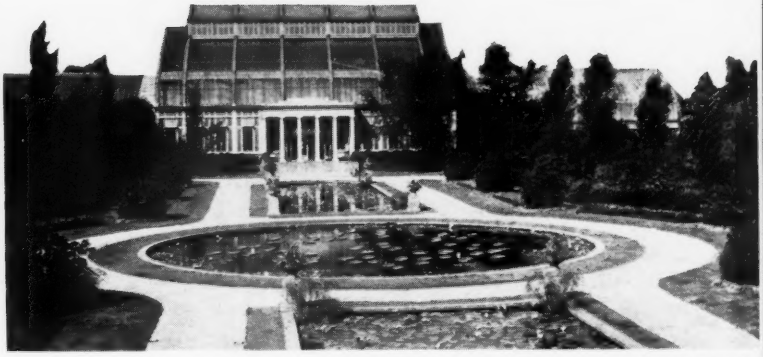
Here are just a few of the famous sites you'll be able to visit during 1956 AVA Convention week . . .



St. Francis Xavier Church

The Jewel Box, Forest Park

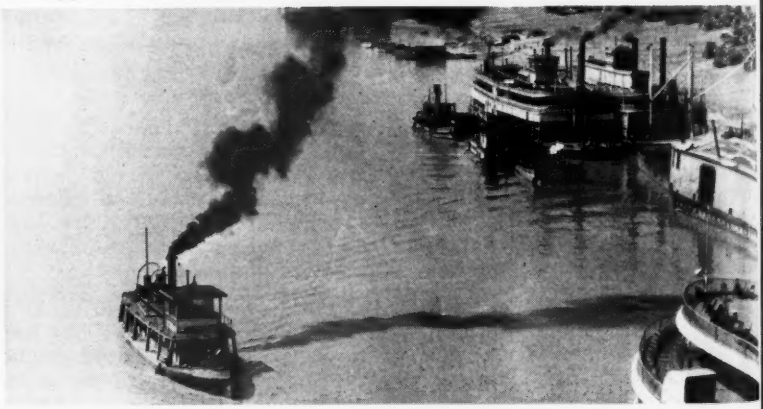
Christ Church, downtown St. Louis



Shaw's Garden

Home of Eugene Field

Mississippi River Steam Boat



How Oregon Serves the Isolated Apprentice

By WILLIAM G. LOOMIS

RELATED INSTRUCTION IS NOW available to approximately 95 per cent of Oregon's registered apprentices. This hasn't just happened! Seven years ago only 60 per cent of Oregon's apprentices had the benefits of related instruction.

Oregon's program provides for registration in more than 100 occupations. Hundreds of apprentices scattered over the state are in small groups or alone. Offering instruction in regular classes to these isolated people is an impossibility.

John P. Walsh, U. S. Office of Education Chief for Trade and Industrial Education, says:

"Making related instruction available to each isolated apprentice has been a challenge throughout the country since the very beginning of a national program of vocational education."

In 1949, Oregon faced the issue squarely. A concerted effort found the way to help the isolated apprentice with a special program. Interested school officials, with the advice and encouragement of labor, management and apprentice representatives, designed the Small Enrollment Program. With the cost per student comparing favorably with the cost of conventional apprentice classes, the plan incorporates these essential elements: occupationally competent local instructors are provided for each trade; if adequate course material exists, instruction for the various occupations is made available in each community; each apprentice is offered some individual instruction in class; local school districts participate; local trade groups, through their participation, provide opportunities for broad educational benefits; local or area supervisors take care of teacher training and class supervision; formal class instruction and home study assignments meet the 144 hour yearly requirement.

The plan was tailored for small towns. Within a few months, however, W. W. Cox, Director of the Eugene Vocational School in Oregon, said to me:

"Bill, there are many isolated apprentices—even in cities the size of Eugene—who do not have related instruction. Why not try the plan here?"

We did, and it worked. Today the program is used successfully in both large and small communities.

In Salem, with approximately 100,000 people in a 10 mile radius, 103 apprentices in 21 occupations are attending class. Fourteen of these 21 classes have four or less enrollees. Salem is typical of at least nine of the larger communities outside of metropolitan Portland so far as apprentice registration is concerned.

The Bend-Redmond area, 135 miles east of Salem, has 16 apprentices in eight different trade classes. In Burns, 132 miles farther east, there are three apprentices in three occupations. Seventy miles north of Burns, in the little town of John Day, five apprentices in two occupations receive instruction. In the Ontario-Nyssa communities about 135 miles east of John Day, 11 apprentices receive instruction in six trade classes. Small enrollment apprentice related classes serve dozens of similar small towns in Oregon.

Of the 186 apprentice classes in Oregon outside of Portland, 165 are of the small enrollment type with a total enrollment of 513. Most of the apprentices in these classes would be without formal related training except for this plan.

How the program operates—

The plan was conceived with basic principles of conventional apprentice class operation in mind. Conventional classes have emphasized individual instruction. In Oregon it is economically sound to conduct such classes for a minimum of eight apprentices. With these and other factors in mind, *the basic concept upon which class schedules were devised assumes that if a conventional apprentice class can be justified with eight enrollees, an individual apprentice is entitled to one-eighth of the 144-hour class—or 18 hours of instructor time.* Two apprentices would be entitled to 36 hours, three apprentices 54 hours, and so on until eight apprentices are available and a conventional class is established.

This basic arrangement for instructor time for each apprentice is coordinated with formal provisions for home-study assignments. As additional apprentices are enrolled, the class time is increased and the home study time is reduced. The combination of class time and home study assignments always equals 144 hours over a minimum calendar period of 30 weeks. For example, one isolated apprentice meets with his instructor in nine one-hour sessions over a nine month period and completes a series of outside assignments approximating 135 hours of home work. The other nine hours of paid instructor time is devoted to laying out and correcting the apprentice's home work. (See chart.)

Course Material

Since a major portion of the apprentices' instruction in the smaller classes comes from home study that is not directly supervised, special attention has been given to providing clear and concise assignments. An all important factor in the effectiveness of this instruction is the quality and type of instructional material available. Comprehensive study guides suitable for directed self-study along with pre-determined time estimates for the material to be covered are essential.

Mr. Loomis is State Supervisor of Trade and Industrial Education, with offices in Salem, Ore. He is Vice Chairman of the AVA T and I Policy and Planning Committee.

Trade Consultants

The Oregon program requires that "at least one representative from the employee group and one from the employer group" be appointed by the appropriate apprenticeship committee to oversee each class locally. They "give encouragement and inspiration to the program" and, in cooperation with the instructor and the school officials, administer at least one evaluative examination each school year to cover the completed study assignments. They recommend to the appropriate apprenticeship committee the number of hours of related instruction credit each apprentice should receive.

The Instructor

The usual procedure is to find an instructor in the community where the apprentice lives. If only one apprentice is involved, the instructor may be his employer or the journeyman with whom he works. The instructor is given a minimum of four hours of pre-service teacher training. He also has one hour of in-service training for every 12 hours he teaches until he has acquired a minimum of 36 hours. The supervisor serving the area usually gives the teacher training. Whenever possible, instructor selection is made with longtime service in mind. Maurice Romig, local director at Coos Bay, speaks from experience when he says: "We have found that it pays to use relatively young people with good reading abilities since they must master the comprehensive course material available and interpret it to the apprentice."

Home Study Assignments

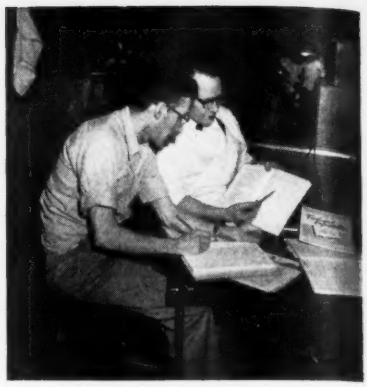
Formal home assignments are probably as important to the small enrollment plan as the keystone is to the arch. Written assignments are an essential part of the pattern. They provide for an application of the study material. Course material is reviewed and evaluated prior to use in order to establish a reasonable amount of clock hours credit for the assignments. It is recognized, of course, that the actual time spent by the individual apprentice will vary depending upon his ability and background, but the pre-determined timing serves as a common denominator in giving credit for home work. We found it advisable to offer special instruction in efficient methods of studying. Bob Adams, power company superintendent and apprentice linemen instructor in Roseburg since 1951, points out that: "At first we didn't pin-point home study assignments enough. They have to be specific and you have to recognize individual accomplishment."

Other Possibilities

One plan developed prior to the use of the small enrollment program provided for the enrollment of diversified occupations in a single class. Despite the safeguards devised to assure practical instruction with some provisions for occupationally competent instructors for each trade, this experiment met with little success.

The correspondence course plan was studied but not utilized because: basic philosophy of public school operation in Oregon, including provisions of the apprenticeship law, sets forth a primary responsibility for education on the local school district level and a correspondence program did not appear to lend itself to local administration; collection of registration fees and providing for study material locally seemed unwieldly; course material developed in Oregon and in other public programs did not appear to be adaptable to correspondence study; the percentage of people who complete correspondence courses is low; and local apprentice committees would be unable to participate.

The itinerant instructor plan was studied but never seriously considered because of the cost and because it tends to centralize administration. The large geographical area to be covered and the many occupations involved made this method appear impractical even if financing were feasible.



Optical technician apprentice Delbert Rogers receives related instruction from Gale Herbst, manager of the Salem branch laboratory of Bausch and Lomb Optical Company. Rogers is the only optical technician apprentice in the Salem area. His class sessions are conducted in the company laboratory.

How Experience Has Helped

"The Medford Apprenticeship Committee has found that the small enrollment class has provided an answer to a problem that has given us a great deal of concern in the past," says A. S. Cummins, President, California-Oregon Power Company and employer member of the Medford Apprenticeship Committee. Mr. Cummins goes on to state: "In the five years that these classes have operated the Committee has found it necessary to provide for an increased amount of supervision over the apprentice's activities to assure best results in the small enrollment program. This additional experience is resulting in the training of better all-around tradesmen."

Glen Hall, master plumber and local instructor for the last five years in Baker, Oregon, when asked about problems dealing with the early operation of the program, said: "Since the apprentice does a lot of work at home, one of the first things we found necessary was to teach good study habits."

"When this plan was started we were among the first to try it. We found out the hard way that the preservice teacher training, particularly, had to be different from that for regular apprentice class instructors," observes Ray Haas, Director of Vocational Education, Forest Grove Union High School.

Schedule of Hours for Small Enrollment Apprentice Classes

Apprentices Enrolled	Class Hours	Home Study Hours	Out-of-Class Instructor Time	Total Paid Instructor Hours
1	9	135	9	18
2	18	126	18	36
3	27	117	27	54
4	45	99	27	72
5	57	87	33	90
6	69	75	39	108
7	81	63	45	126

Paul Wilmeth, Area Supervisor of Industrial Education in Salem, says, "Small class enrollments tended to make this program too informal—using trade consultants to evaluate the apprentice's progress helped to overcome this weakness."

Program Acceptance

The people who are served are, of course, most important in evaluating results. Here are a few comments from apprentices, graduates, and others.

"I passed the state examination for licensed plumbers the first try with a good grade. The small enrollment class I attended made this possible."—Max McConkey, journeyman plumber, Ontario.

"My instructor always spends more time with me than the class schedule calls for—in the small town where I live people are always willing to help one another."—Larry Nielson, glazier apprentice, Pendleton.

Members of the Oregon State Apprenticeship Council have been keenly interested in the plan from its inception. In their June 2, 1952 meeting they reaffirmed their sincere interest in providing related instruction for *all* apprentices under their supervision by passing the following resolution *which could only be meaningful state-wide through use of the small enrollment plan*:

". . . that a letter be sent to all trade committees asking them to review their related material needs and ascertain whether or not they need the full number of hours of related training called for by the standards and, if not, to change the number of hours of training and then enforce the standards by actually requiring attendance."

The promise of continued progress for the future seems most aptly stated by H. E. Barker, First Vice President, Oregon State Federation of Labor, AF of L-CIO, and member of the Salem Apprenticeship Committee for over 20 years, who comments: "If course material were available for the less common apprenticeable occupations, every apprentice would have related training in this state. With the continued support of labor and management and the fullest cooperation from the educational agencies concerned, we can look forward to complete related instruction coverage in the future."

"Keep away from white elephants," our author pleads, as he discusses

Building for Business Programs

By RODNEY G. WESSMAN

IT IS OBVIOUS THAT within the next few years, our country faces the biggest school building period in history. War babies *will* go to high school and college.

In a period of rapid expansion in any area of life, it is easy to make mistakes. The quicker a thing must be done, the greater the chances of error in judgment.

During the next few years, business educators, together with educators in general, are going to be called upon to aid in the planning of facilities to house the increased influx of students, as well as to select instructional materials, machines, and other items of equipment.

I do not pose as an authority on equipment and layouts for business education. Neither can I boast of years of experience learning 'the hard way'—if learning from bitter experience is 'the hard way.' Since I'm neither an authority nor an "old" old timer I would simply like to indicate some of the procedures which we found helpful in planning new facilities for business education, as well as in selecting new equipment.

At Bakersfield College we have recently completed a new campus. We think we have a remarkable business education building. Even some people outside our own city will agree! I'm vain enough to wish that I could claim all the honor for developing such fine facilities, but I can't honestly do that. We have been fortunate in having an extremely cooperative and far sighted group of administrators. Without these people, our present facilities would still be only a dream. Too, we were blest with an understanding group of architects who kept us posted at all times as to what was going on. We were immediately informed of any changes that had to be made. Then, too, we have an extremely able group of business education teachers who, on the whole, kept the interest of the students and community first . . . even though it meant not having a "coffee station" or an overstuffed couch in each office. In short, our present dream building is now more than a dream because all these people working together made it so. I must also pay tribute to our fine citizens who okayed our bond issue some time ago. Without them, our plans would still be only plans.

Planning a business education facility should begin well in advance of construction. We began planning a good five years before construction began. Our administration keeps close tab on enrollment figures and prospective enrollment figures. We have prospective enrollment figures for at least 10 years in advance. Those figures clearly indicate that within a few short years, we will have a junior college of 2500. At the time, we shared a campus with Bakersfield High School. These facts pointed to the need for a junior college on a separate campus, so the planning began. This was before we had the necessary money, but we felt that our citizenry would not fail us, once they knew our needs.

Dr. Wessman is Chairman of the Business Education Department, Bakersfield College, Bakersfield, Calif.

Our task then, was to begin planning for a business education facility for a school of 2500. How many would be in the business education department? How many would elect courses in the department, even though they were not business majors? These questions had to be answered. This meant studying our past records, checking on class enrollments, and determining the number of students in each business major.

It also meant ferreting out studies made on the problem. Studies on the ratio of business enrollments to the toltal enrollments were helpful. We also studied the experience of other junior colleges who shared high school campuses to determine what happened when *they* moved on to a separate campus. Generally, a distinct rise in enrollment occurs as junior colleges move to a separate campus. How much would ours increase? Using the experiences of others, we had to guess.

Once we determined what our approximate enrollment would be, we began the task of determining the number of rooms we needed, and the nature of the rooms. Here we made good use of a booklet entitled *Facilities and Layouts for Business Education,* Business Education Publication No. 68, California State Department of Education, Commission for Vocational Education, Bureau of Business Education.

This booklet suggests complete layouts for business education departments for schools of various sizes. It was helpful in determining room sizes, and the number of square feet for each student station.

At this point, however, we found it necessary to ask ourselves some questions that had to be answered in order to avoid monstrosities. *(If a facility does not meet the local needs, it* is *a monstrosity.)*

First, how many people should we accommodate in each room? Should we plan for 20 or 50? What is the school policy? If the policy is 50, should we not scare up some studies which prove that 25 or 30 is the optimum number for effective learning? In what ways does our local community differ from the average community? Do we have industries or businesses which require a good number of calculating machine operators? Does the nature of our community call for advanced training in calculators?

In answering these three questions, we found our recent community survey of great help. We also used the results of several studies regarding the use of various business machines in our community.

What are our curriculum trends? Will the general education emphasis squeeze vocational education out of the curriculum? (If so, we had better create multi-purpose rooms.)

Bakersfield College, in California, shares with business educators the teachings of experience in planning for expanded business department facilities

After determining the number and kinds of rooms, we faced the problem of layout. This was a cooperative effort. Pooled ideas are a *must* in a venture of this nature. (It's also nice to share the blame for monstrosities that *may* arise!)

Leadership is important in this area. Everyone cannot have everything he wants. Odd ideas that department members may have must be squelched. While a staff member may be able to justify a curved corner mirror in her office, a male member of the faculty who may use the office later would view the effect with tongue in cheek.

In determining the most functional layout of a business education unit, we felt compelled to find the answers to these questions:

What is the required number of square feet for each student station? This should be determined for each type of student station, i.e. typewriting, office practice, accounting, shorthand, and general.

How can we visualize the completed unit? From one of our local suppliers of office equipment and furniture we borrowed some scale models to "play around" with. This helps in visualizing space requirements and furniture arrangements.

What electrical outlets will be necessary? Remember, electricity is here to stay! Floor conduits are expensive to put in later. They should be so placed that the room can be rearranged from time to time.

What about the windows? We remembered that light should ideally come over the right shoulder in a typing class.

Where should the teacher's offices be located? How many teachers should be in each office? Where should the offices be in relation to the various class rooms? Should all teachers offices have telephones?

What about maximum utilization? Shall we equip the office practice room so that it can be used only for office practice or should we equip it so that it can be used every hour of the day if necessary? At Bakersfield College, we will be able to use our office practice class room every hour of the day if necessary, even though each student station will have a typewriter and a calculator at the desk. Of course we had to design our own desk in order to accomplish this.

What about the department office? It should be readily accessible to the public since it will be frequently visited. It must be presentable at all times. Remember, we are teaching good business practices. What we do will speak louder than what we say!

Which classrooms should be clustered? Having typewriting, shorthand and office practice rooms in close proximity has obvious advantages.

What about glass partitions? We used them between the duplication room and the office practice room, with a door adjoining. But we have these windows covered with heavy black drapes for both audio-visual and privacy purposes. In that way, the duplication room can be used as an adjunct to the class room, as well as for duplication purposes aside from a class room activity.

About a year before we had to order furniture and equipment for our unit, we began collecting catalogues and brochures from manufacturers. We organized a separate file drawer for these items, and arranged them alphabetically according to the name of the manufacturer. This file

saved hours as well as dollars when we began to buy.

Next, we had to determine the overall policy of the administration regarding certain items. Were the desks to be uniform for all offices? Were all student desks to be uniform throughout the college, or did we have a choice as to make and model? What "pressures" could we bring to bear in order to get the type of furniture we wanted? Could we justify steel furniture if wooden furniture seemed to be preferred? Will the steel furniture last long enough to justify the added initial outlay?

A definite furniture plan should be decided upon. Uniform furniture throughout a department makes it easy to change furniture from room to room. This also creates a neat and business like appearance.

When it comes to buying equipment, it perhaps is safe to "be not the first by whom the new is tried, nor yet the last to lay the old aside!"

In selecting our new equipment, we asked ourselves these questions:

What business machines are used in our area? We used the results of a recent business machines survey to arrive at the answer.

Even though a machine is used extensively in the area, should we give instruction on it? Some machines are very simple to operate, and require only an hour's instruction, while others are quite complex, and require extensive training.

What is the "maintenance reputation" of the agency selling the machine in which we are interested? Business teachers need not be reminded of the importance of that answer!

If we have a set budget, can we afford the machine? If we can afford only certain machines, we will want those which we can put to maximum use.

What do we know about the machine under consideration? We used our machines and equipment files for this answer. We also asked machine representatives to come out and demonstrate their machines for us. And we checked with owners of the models we were interested in.

Almost everyone makes a "poor buy" occasionally. It is our hope that your monstrosities and white elephants will be somewhat decreased by following these helpful hints.

Future Farmers Meet in Egypt

"I believe in the future of farming with a faith born not of words but of deeds."

Seventy young men, first year students of the Secondary Agricultural Schools of Egypt, expressing that philosophy, met at Komombo, some 500 miles up the Nile from Cairo, for eight days in December. This was the first meeting of its kind in Egypt—Egyptian boys meeting "to practice brotherhood, honor, rural opportunity and responsibility and to develop these qualities of leadership which a Future Farmer should possess."

The meeting was the result of Egyptian-American Cooperation which has been developed during the past year and a half under the program of the International Cooperation Association. Egyptian and American technicians have been working together since the summer of 1954, developing plans for improving the curricula of the agricultural schools, developing programs of practical training for teachers, promoting more actual farm training for students, and encouraging leadership training.

The program for the Komombo meeting included five half-days of work on the farm of the Komombo Land Company during which the boys had practice in preparing the land for sugar cane and other planting, stripping and harvesting cane, pruning citrus trees, observing land reclamation operations, and tractor operations. In addition, the boys conducted meetings; participated in various contests including general knowledge tests, plant and seed identification, leadership, activities and games; visited the local sugar company factory, the Komombo Temple and the Asswan Dam; saw moving pictures furnished by the U.S. Information Service and other services; and heard talks by leaders in the Egyptian Ministry of Education and the USA Operations Mission to Egypt.

The boys wore uniforms furnished by their schools, including overalls, shorts, socks and shoes and pullover sweaters with the words "Future Farmers" embroidered in Arabic across the front.

The best indication of the success of the meeting lies in the fact that plans are immediately being made for a similar conference to be held in the Delta probably during July with several hundred first year students enrolled.

Conferences are also being held among representatives of the Ministry of Education, the Ministry of Agriculture and the Agriculture and Education Divisions of the USAOM/E to coordinate the development of rural youth organizations. The plan is to promote organization on the local level and to have any possible national organization develop gradually in response to needs as the 4-H and FFA organizations have developed in the United States. — Louis M. Sasman, Specialist in Voc. Educ, ICA.

Only 9 Weeks before the Fun Starts!

If you have not yet entered your students in FORD'S 10th annual INDUSTRIAL ARTS AWARDS PROGRAM, there's still time to do so! $50,000 in prizes!

Don't wait another day! ACT NOW!

Cash awards for students! Exciting 3-day all-expense trips to dynamic Detroit for students *and* their teachers! All this, *plus* the fun—and recognition—of taking part in the country's biggest, best-known program for industrial arts and industrial vocational teachers and students!

New! Student Craftsmen's Fairs

This year, Ford is encouraging and assisting in the sponsorship of Student Craftsmen's Fairs all over the country. These Fairs will serve as local "showcases" for IAA entries, and as recognition-getters for participating students and teachers. Already, Fairs are scheduled for Philadelphia, Long Beach, Greensboro, Miami, and London, Ontario. There'll be others, too. If no Fair is planned for your area, we'd be pleased to help you get one started. Free promotional assistance is yours by writing us at the address below.

Fairs must be over in time to ship entries to Salt Lake City or Dearborn *for the national IAA competition.*

Projects must be RECEIVED by these days:

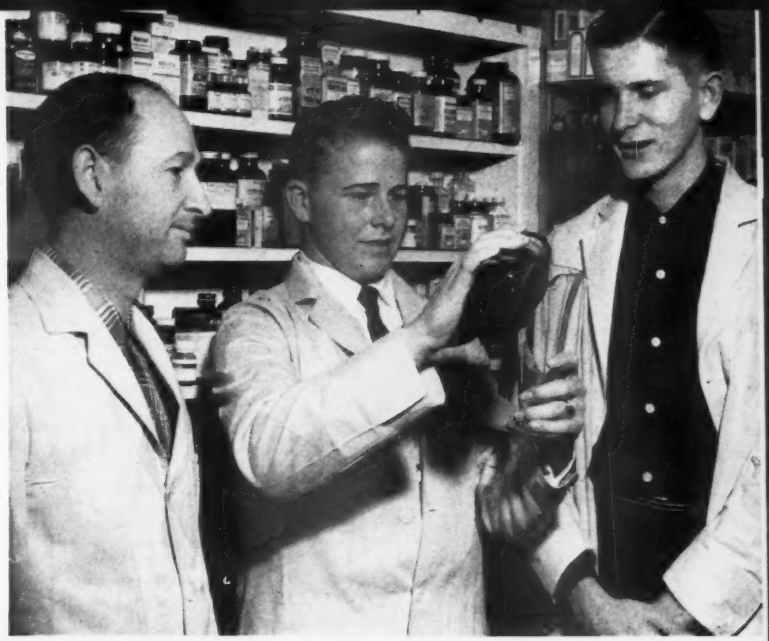
JUNE 10
IN
SALT LAKE CITY, UTAH
Receiving station for projects made in Montana, Wyoming, Colorado, New Mexico, and states further west.
JUNE 25
IN
DEARBORN, MICHIGAN
Receiving station for projects made in all other states.

If you have not received your IAA rules booklet and entry blanks, write:

FORD INDUSTRIAL ARTS AWARDS • 3000 Schaefer Road, Dearborn, Mich.

DE does it again!

Here's a success story coordinators everywhere will want to use in public relations programs



DEL CITY HIGH school youth and Del City merchants are proud of the school's program in distributive education.

What is it? It's a plan supervised by Gene McElhaney, the distributive education coordinator, in which students go to school part-time and work in retail or wholesale sales jobs or service occupations part of their school time.

It's the school's way of helping students find an occupation.

"The boy finds his schoolwork has a connection with his job and his ambition catches fire," is the way McElhaney puts it.

There are now 35 students at Del City high school enrolled in DE. Most of them work in the Del City area, though others have part time jobs in downtown Oklahoma City and Midwest City.

It's the second year for the DE program at Del City.

"A lot of people can't see the tie-in between washing dishes in a drugstore fountain and their education," McElhaney said.

"But it helps the students find themselves," he explains.

Typical of the DE students is Robert Daniels, 18, of 3925 Thomas Drive.

He first became interested in DE in May, 1954, he says. That's when M. J. DeBenning, State Supervisor of Distributive Education, went to the Del City school and talked with all 10th and 11th grade students.

"He told us the following year we would have a fulltime DE program and that if we were interested, we should enroll for the next year."

Robert Daniels, left, does an extra-special job of selling when his coordinator, Gene McElhaney, comes into the drugstore where he is on the job.

Daniels said he first figured the course would give him "an easy two credits, get me out of school early and let me make some money."

He enrolled, only to discover there was some real work involved for those two credits.

McElhaney soon found a spot for him to work. Jim Lett, owner and manager of a drugstore, needed a fountain boy. Daniels applied for the job and was hired.

"At the time Mr. McElhaney phoned me, I was a newspaper boy and had no plans for the future," Daniels recalls.

"I was somewhat confused. But after working a while at the drugstore, I definitely became interested in the field of pharmacy and I am now convinced that will be my life's work."

Daniels, center, even gets a chance at some practice pharmacy at the drugstore. The watchful eyes belong to Jim Lett, operator of the store, left, and Don Barker, pharmacist, who is a product of the local distributive education program.

Don Barker, registered pharmacist at the store, also is an alumnus of the school DE program. He's giving Daniels a few tips and a lot of encouragement.

"He's encouraging me to put away money by matching 50 cents with every dollar I save towards the expenses of taking a course in pharmacy at college," Daniels relates.

Barker explains that he was encouraged in the same way while he was still a high school student and vowed he would repay the favor by helping someone else in the same way.

When he's not working in the store, Daniels is taking courses at Del City high school to tie in with his work. He says the school training has helped him win sales contests among the drugstore employees.

Lett, Daniel's work-time boss, must figure his employee earns his pay. The drugstore operator was speaker at the employer-employee banquet staged for all students in the DE program and their employers.

He praised the program for the opportunity it gives the high school students and the help it gives employers in assuring better trained workers.

AROUND THE NATION

Future farmer groups, newly organized in Egypt, appeal to boys. (Story, p. 27.)

Printing Industry Career Opportunities Report Available

American Type Founders has made available to schools and the graphic arts industry, for distribution through the Education Council of the Graphic Arts Industry, its 31-page booklet, "Career Opportunities in the Graphic Arts Industry." This publication presents in a scholarly manner the career and vocational opportunities offered by the graphic arts industry. Its distribution to guidance counselors, graphic arts teachers, libraries, printers and local printing trade groups will be handled by the Education Council's Vocational Guidance Committee, whose chairman is Loren H. Carter, Training Director for R. R. Donnelley & Sons Co., 350 East 22nd Street, Chicago 16, Ill.

The text, the eight tables, and three charts in this report were prepared by the American Type Founders under the supervision of John T. Porter, Director of the Education Department. The statistics are based on the latest available figures from various government agencies and the Research and Marketing Departments of ATF, and present to guidance counselors, youth leaders, and printing teachers an up-to-date picture of the graphic arts industry and its vocational opportunities. Free copies may be obtained by writing to the Education Council of the Graphic Arts Industry, Inc., 719 Fifteenth St., N.W., Washington 5, D.C.

Hampton Plans Open House

The annual open house of the Division of Technology, Hampton Institute, Hampton, Va., will be held in connection with the Hampton Institute Awards and Skills Competition, April 28.

High school seniors may compete for awards and scholarships in any of these areas: architecture, engineering, building construction, vocational industrial education, and industrial arts.

Further information is available from John L. Frank, Chairman, Department of Industrial Education, Hampton Institute, Virginia.

Where do your graduates go?

Men Trained for Industry is the title of the latest publication issued by the Vocational-Technical Department, Allentown Pa. A bright plastic spiral binds this 48 page, 9 x 12, profusely illustrated story of what happens to the vocational-technical graduate in Allentown.

This is not a statistical study but it does trace the employment picture for a cross section of Allentown's graduates. It shows where these people are working and it describes the positions they hold.

In a page of preface, Clifford S. Bartholomew, Allentown High School Principal, and John T. Shuman, Assistant to the Superintendent for Vocational and Adult Education, tell the industrial leaders of Allentown and Lehigh Valley, to whom the book is dedicated, that they can "walk through almost any local industrial plant and will find many other graduates similarly employed on key jobs where their technical knowledge, and skills and frequently supervisory ability helps keep industry progressing. . . .

"They are the key men in our economy and one of the reasons why the Lehigh Valley is attractive to industry and why the vocational-technical department of your high school plays a vital part in it."

Utah Plans New Buildings

Two additions to vocational plants in Utah will be completed this year. Central Utah Vocational School will have a new wing to provide housing for auto mechanics, diesel, farm mechanics and practical nursing programs. This will allow these classes to move to the campus from old buildings located off campus.

Weber College, in keeping with plans to move all classes from a lower campus up to a new hillside plant, will soon have a new tech building. Classrooms, laboratories and shops for the vocational program will be located in this structure.

New Vo-Ed Film Available

A new motion picture—*Vocational Training in the Oil Industry*—has been produced by the Petroleum Extension Service, University of Texas, Austin, Texas, under the auspices of the American Petroleum Institute's Division of Production and the Committee on Research and Education, American Association of Oilwell Drilling Contractors.

In full color, with a musical background and narrated sound track, it may be purchased from the Petroleum Extension Service of the University of Texas.

NEA OFFICIAL'S LETTER SPEAKS UP FOR VOCATIONAL EDUCATION

The Honorable James P. Mitchell
Secretary of Labor
Washington 25, D. C.

March 1, 1956

My dear Mr. Secretary:

I have today received the Department of Labor's new publication *The Skilled Work Force of the United States.* It is a concise and graphic description of one of our most important domestic problems—the shortage of skilled technical and scientific manpower. Charts VII, VIII and IX showing the various correlations between education and Armed Forces experience are especially valuable.

Because of the general usefulness of the information given in the booklet, I am disturbed by the lack of emphasis on vocational education in our secondary schools, a program that the federal government has encouraged and supported since 1917 when the Smith-Hughes Act was passed. As far as I can determine, this program is only mentioned twice, somewhat perfunctorily in each instance. I refer to Chart III and accompanying text and to the conclusions on the final page of the publication.

I appreciate the desire of the Department to emphasize the contribution of its Bureau of Apprenticeship. However, I am sure you will agree with me that we must make increased use of all existing federal programs to encourage the development of skilled manpower. Certainly this was the case during World War II when vocational programs in our secondary schools and some of our junior colleges together with other training programs made it possible for more industries to obtain the increased numbers of skilled workers they needed.

I am happy to inform you that I am sending a copy of *The Skilled Work Force of the United States* to each member of the NEA Legislative Commission.

Very truly yours,

J. L. McCASKILL
Executive Secretary
NEA Legislative Commission

JLMcC:va

with Vocational Education

Students representing three traditionally basic trades—food, clothing and building, were featured at a Board of Education meeting, Los Angeles, Calif., as part of special ceremonies that were planned in observance of Trade Education Week, March 4-10. Mayor Morris Poulson proclaimed the week in honor of the Los Angeles Trade-Technical Junior College's 30 years of service during which 360,000 industrial workers have been trained for good jobs.

VIRGINIA OFFERS NEW DE PROGRAM

The distributive education program in communities throughout Virginia this year is expanding training offerings into the field of petroleum marketing. With a double-barreled program, the DE service and the oil industries of Virginia have teamed up to train service station dealer-managers of selected, qualified service stations. At the same time, DE cooperative part time students are trained for jobs at the participating service stations.

The dealers are schooled in the selection, supervision, and training of personnel as well as in the operation and management of the business. After they have completed work under the direction of local DE coordinators they will attend a Management Training Institute for Service Station Dealers at Richmond Professional Institute and Virginia Polytechnic Institute. The program is already underway in most of the 70 communities where it will operate.

High school boys enrolled in DE are placed at the selected service stations. Five new manuals developed by the American Petroleum Institute and the University of Texas are used in their high school DE curriculum.

Organization for putting the new program into operation was worked out last summer when an overall state coordinating committee formulated policies. The committee members are: Louise Bernard, State Supervisor of DE; Leroy Schneider, Owner-Manager, Schneider Oil Company of Roanoke, and E. D. Chatterton, Executive Secretary, Virginia Petroleum Jobbers Association.

AFL-CIO Reaffirms Faith in Vo-Ed

Included in the AFL-CIO resolutions on education that were approved in 1955 convention proceedings was one that is directly concerned with vocational education in the United States:

"From it inception the trade union movement in America has recognized the value of vocational education. Labor has continuously supported the principle of such a program of federal support of such a program even when it has opposed certain administrative features of the program.

"The AFL-CIO strongly urges support for a program of vocational education which recognizes the primary responsibility of the trade unions in developing skill and craftsmanship. It urges the development of a program through which a more extensive appreciation of the value of such training can be developed in all elements of society. At the same time, the AFL-CIO pledges its continuing support for the program giving financial support in apprenticeship training in direct cooperation with the trade unions in the fields in which the training is given."

Congressman Vinson presents gavel to Senator George for AVA

Senator Walter F. George (l.) of Georgia, who has the longest record of senatorial service in National Congress, accepts a gavel from Congressman Carl Vinson of Georgia who has the second ranking membership in the U. S. House of Representatives. The gavel, student made at the North Georgia Trade and Vocational School, Clarksville, was presented to Senator George by Cong. Vinson in behalf of the AVA.
In the presentation statement, he said: "It is a pleasure for me to present to you on behalf of your host of vocational friends in Georgia and throughout the nation this beautiful hand made gavel . . . It is presented in appreciation . . . for the outstanding role you have played for more than a quarter of a century in promoting the further development and improvement of vocational education in the public schools of the nation. . . ." Sen. George is now the President Pro Tempore, U. S. Senate.

LET PHOTOGRAPHS HELP YOU TEACH!

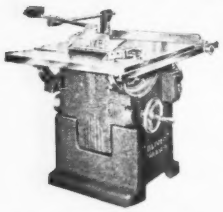
Washington comes alive for classes in government, history, etc., with this beautiful set of 8 glossy 8 x 10 ACTUAL PHOTOGRAPHS of the highlights of the Nation's Capital.

only **3.95** post-paid

RHOMAR STUDIOS
P. O. Box 1723
Washington 13, D. C.

You can teach more with this OLIVER Saw Bench because it does more!

This sturdy Oliver Saw Bench rips, cross-cuts, dadoes, miters with amazing accuracy. Saw arbor tilts up to 45°. Rips to 27" wide. Cross-cuts 13" wide, 2¼" thick. Anti-kick back catch for utmost safety. Most accurate set of gauges.



Write today for Bulletin 232D

OLIVER MACHINERY COMPANY
Since 1890 GRAND RAPIDS 2, MICH.

NEW FOLDER— FREE FOR YOUR GUIDANCE FILE

"VOCATIONAL OPPORTUNITIES IN THE HOTEL AND INSTITUTIONAL FIELD"

The hotel and institutional field offers unusual opportunities today to men and women, both young and mature. The Lewis School—original and only school offering both resident and home study hotel training courses—has prepared a FREE folder for Guidance Officers giving full details about this fascinating field. Write on your letterhead to:

LEWIS HOTEL TRAINING SCHOOL
Vocational Guidance Div., Room BD-4904, Wash. 7, D. C.

ANOTHER VOCATIONAL PROJECT

Build a Laboratory Tested MOISTUROMETER. Measures moisture of granular materials, the soil, etc. Complete Plans—$2.50 Catalog No. 4, 2[illegible] pages, over 125 Projects FREE on request.

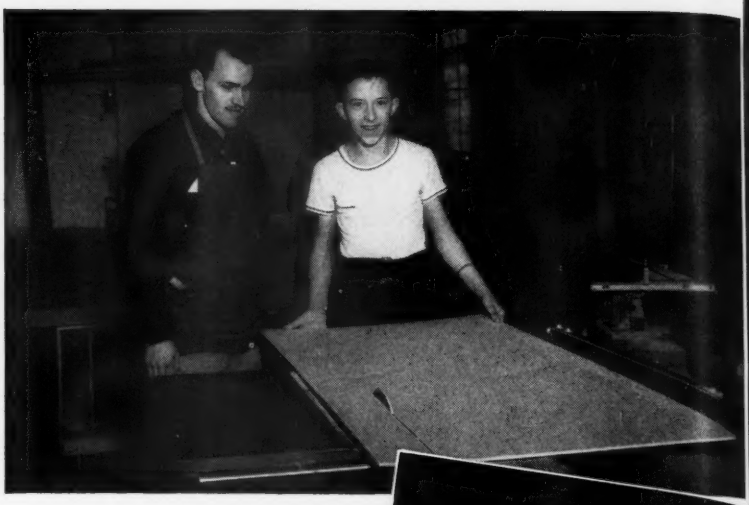
HENRY FRANCIS PARKS LABORATORY
104 S. E. 57th Ave. Portland 15, Oregon

QUANTITY DISCOUNTS on LEATHER SUPPLIES

Complete supplies leather, books, tools, 75 locations coast-to-coast guarantee faster service at lower cost.

FREE **Write For New Leathercraft Catalog No. 78.**

TANDY LEATHER CO.
P. O. BOX 791-VF FT. WORTH, TEX.



Your students will enjoy building any of these interesting projects. The clear, easy-to-follow plans—plus big easy-to-work panels—make for professional-like results when you use

FIR PLYWOOD

INTERIOR-TYPE PLYPANEL DFPA QUALITY

EXT-DFPA DFPA QUALITY

Look for DFPA trademarks—your assurance of DFPA quality-tested fir plywood. PLYPANEL is versatile one-side grade of interior-type fir plywood. For all outdoor uses, insist on EXTERIOR-TYPE; the EXT-DFPA on the panel edge is your positive identification.

INSIST ON DFPA-INSPECTED FIR PLYWOOD

37 PLANS for classroom projects **FREE** to industrial arts instructors

CHECK PLANS YOU WANT— MAIL COUPON—THAT'S ALL!

- ☐ UTILITY TABLE
- ☐ STACKING CABINETS
- ☐ BUFFET STORAGE CABINET
- ☐ UTILITY SHELVES
- ☐ TOOL-CABINET WORKBENCH
- ☐ DOUBLE DUTY DESK
- ☐ COFFEE TABLE
- ☐ BEDSIDE TABLE
- ☐ STUDENT'S DESK
- ☐ CHEST OF DRAWERS
- ☐ TWO-DOOR CABINET
- ☐ TV STOOLS
- ☐ CHILD'S TUMBLER
- ☐ CHILD'S TABLE AND STOOLS
- ☐ BUNK BED
- ☐ BOAT BED
- ☐ TRAIN TABLE CABINET
- ☐ COVERED SAND BOX
- ☐ TOY STORAGE BLOCKS
- ☐ PORTABLE GARDEN CADDY
- ☐ SECTIONAL PATIO TABLES
- ☐ OUTDOOR SERVING WAGON
- ☐ SUN SLED
- ☐ GARAGE STORAGE BOX
- ☐ GARDEN CABINET
- ☐ PATIO FURNITURE
- ☐ ODDS 'N ENDS CABINET
- ☐ 15' SAILBOAT
- ☐ 20' SAILBOAT
- ☐ 11'3" OUTBOARD
- ☐ 9' FLAT BOTTOM DINGHY
- ☐ 7'9" PRAM DINGHY
- ☐ 13'4" OUTBOARD
- ☐ 13'6" INBOARD RUNABOUT
- ☐ HOG HOUSE
- ☐ POULTRY HOUSE
- ☐ ROLL-AWAY POULTRY NEST

DOUGLAS FIR PLYWOOD ASSOCIATION, DEPT. AV, TACOMA 2, WASH.

Without obligation or charge, please send me a copy of the plans I have checked above.

NAME.....

SCHOOL.....

ADDRESS.....

CITY.....ZONE....STATE.....

(Good in USA Only)

SSOCIATION NEWS

EW OFFICERS

ebraska

. M. Kildee, Fremont High School, remont, President; Wilda Carr, oldredge, Vice President; Mrs. azel L. Smith, Lincoln, Secretary-reasurer; and William Jaques, ounselor.

regon

aurice M. Romig, Coos Bay, Presi-ent; Robert Crain, Milwaukie, Vice resident; Ruth Baumback, Harris-urg, Secretary; and Al Ringo, oodburn, Treasurer.

ld Dominion (Virginia)

rs. Pauline C. Morton, Franklin, resident; E. L. Morse, South Hill, ecretary; C. B. Jeter, Richmond, ice President, Agriculture; S. W. lue, Petersburg, Vice President, T ; Edna Holmes, Lynchburg, Vice resident, Home Economics; Sum-er Maddin, Richmond, Vice Presi-ent, Business; W. W. Craighead, ictoria, Past President.

The 1956 **Industrial Arts Round-up,** onsored annually by the Industrial Arts lub of Illinois State Normal University, ormal, is scheduled for May 5.

———AVA———

The New York State Steering Committee r Industrial Arts, a representative body mposed of delegates and officers from e state's 38 industrial arts teachers clubs, ill meet in conjunction with the **New ork State Vocational and Practical rts Association** Convention, New York ty, April 13-14. The steering committee ill have a session on April 11 and 12.

———AVA———

The 24th Annual **Indiana Industrial ducation Association** Convention con-ned in French Lick March 29-31. H. G. cComb, State Director of Industrial and istributive Education, served as general airman for the March 29 meetings. The nual banquet was held on March 30, th John H. Hinds, IIEA President, as hairman. Main speaker for this event was r. Charles Irvin, Department of Com-unication Skills, Michigan State Uni-rsity.

Section meetings for industrial arts and ocational teachers were scheduled for arch 21. Considered in separate sessions ere machine shop, drafting, auto mechan-s, diversified cooperative education, elec-icity, printing, general metals, the build-g trades, and woodworking. Distributive ducators met together for two days of the nvention and, throughout the proceed-gs a program of entertainment was of-red for the ladies.

———AVA———

Cecil E. Stanley, Nebraska State Director Vocational Education and Past President the AVA, was a featured speaker at the 56 convention of the **Arizona Vocational ssociation** in February. Mr. Stanley spoke n the activities of the AVA and later par-cipated in a panel discussion.

Charles R. Crakes, whose services as a speaker and discussion leader for educational conferences are available through the courtesy of DeVry Technical Institute, spoke on *Trends in Occupational Opportunities for American Youth* at the February 10 meeting of the Western Chapter, Massachusetts Vocational Association. On March 17 Mr. Crakes served as the banquet speaker at the annual convention of the California Industrial Education Association.

Mr. Crakes is scheduled to appear again as a banquet speaker for the Willamette Valley Industrial Arts Teachers Association meeting, Portland, Oregon, April 19 and for the Pennsylvania Council of Local Administrators of Occupational Education meeting, Eagles Mere, Pa., June 20.

Organizations interested in featuring Mr. Crakes as a speaker should contact the DeVry Technical Institute, 4141 Belmont Ave., Chicago 41, Ill.

———AVA———

The **New York State Counselors Conference** will convene at the Hotel New Yorker, New York, N. Y., April 26-28. Members of the New York State Counselors Association and others who are actively engaged or interested in guidance are invited to attend.

With *Meeting Manpower Needs* as a theme, the attendance will hear Dr. Hugh Flick, Dr. Ely Ginsberg, Ethel Hubbard and E. Lloyd Moreland speak on special subjects. Further information is available from Marvin Gibson, Hicksville Public Schools, Hicksville, N. Y.

———AVA———

Responsible for the recent issue of a public relations brochure for the **Minnesota Industrial Arts Association** are: Dr. Raymond H. Larson, Chairman and Editor, St. Cloud Teachers College; Dean Nordell, Industrial arts instructor, Worthington; Eldon Brandt, industrial arts instructor, Winona; Wesley Wolhart, industrial arts instructor, Columbia Heights; Howard Walton, St. Cloud Teachers College; and L. M. Lindemann, industrial arts instructor, Dawson.

The committee collected the necessary data, completed the art work, edited and compiled the brochure which is designed as a public service. Single copies are available without charge from Fredric H. Rowell, Secretary, Minnesota Industrial Arts Association, Richfield High School, Richfield 23.

The ninth annual **Trades and Engineering Conference** of the Schools of Engineering and Mechanical Industries at Tuskegee Institute was held in Tuskegee, Ala., on Feb. 17-18, 1956. Theme of the sessions, held during the Diamond Jubilee Anniversary Year for Tuskegee, was *Technical Education and Manpower Utilization.*

———AVA———

The **Twenty-Second Annual Prairie View A & M College** Industrial Education Conference and Annual Awards Contests will be held in Prairie View, Texas, April 13-14. Theme for the meeting this year is *The Role of Industrial Education in Industrial Automation.*

———AVA———

Dr. J. Warren Smith, N. C. State Director of Vocational Education, will be the main speaker at the annual convention of the **West Virginia Vocational Association,** scheduled for Jackson's Mill, April 12-14. Six problem clinics will be offered for the professional help of WVVA members on guidance, teaching aids, community relationships, problems of beginning teachers, student clubs, and adult education.

Andrew K. Ault, President, West Virginia Vocational Association

The JOURNAL extends apologies to Mr. Ault, whose picture was omitted from the roster of state association presidents (even though it was among the first to be submitted for publication).

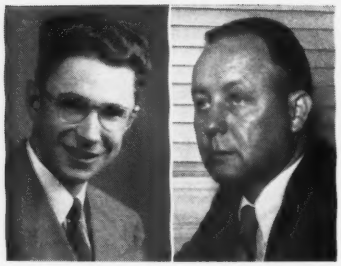
IAPPC CABINET MEETS IN D. C.

Members of the cabinet of the Industrial Arts Policy and Planning Committee met in Washington at AVA headquarters March 1 and 2. All members were present.

Dr. M. D. Mobley and Lowell A. Burkett of AVA headquarters Dr. DeWitt Hunt, U. S. Office of Education, and Dr. Stanley Pawelek, Baltimore, Md., were invited to join the meeting.

(Continued on page 36)

IAPPC Cabinet, l. to r.: Wesley Ketcham, Conn.; DeWitt Hunt, Washington, D. C. (guest); G. Harold Silvius, Mich.; Verne Pickens, Mo., Secretary; Shriver L. Coover, Pa., Chairman; Harry O. Thomas, La. (guest); William R. Mason, Ohio; and Chris H. Groneman, Texas. Plans for the convention were discussed.



Lloyd C. Rixe H. E. Robinson

AVA Member Lloyd C. Rixe Is No. 30,000!

AVA member No. 30,000 came into being March 15 when H. E. Robinson, Secretary-Treasurer of the Montana Vocational Association, submitted 1956 dues for Lloyd C. Rixe, vocational agriculture major at Montana State College, Hilger.

For two months the Journal has waited to introduce AVA No. 30,000 to its readers. He is pictured above with the proud secretary-treasurer, Mr. Robinson, who sent in his name at exactly the right time!

Lloyd Rixe was born and raised in a farming community in central Montana. An active FFA member at the Fergus County High School he was President of his Chapter and a delegate to the 1953 FFA Convention.

In the fall of '53 Lloyd enrolled at Montana State. There he is a member of the collegiate FFA chapter and a member as well as an officer of the agriculture club. Recently he was elected to the national honorary fraternity for ag students, Alpha Zeta. He is also a member of Kappa Sigma.

And of course Lloyd is planning to be a vo-ag teacher. We hope his No. 30,000 tag will spur him on to success!

Mr. Robinson, who served MVA as Secretary-Treasurer for the past two years, has been teaching vo-ag for 24 years! An AVA member for "as long as he can remember," he is now in his 20th year of service at the Flathead County High School, Kalispell. For the past five years he has served as head of the Vocational Department for his school.

During Mr. Robinson's tenure at Flathead High his FFA chapter has won 13 consecutive gold emblems in the National FFA Chapter Achievement Contest. His many other contributions to the program and his active interest in AVA affairs have groomed him well as a natural winner in AVA's membership competition.

———AVA———

The University of North Dakota, Grand Forks, will sponsor its **Annual International Business Education Conference** June 18 and 19. With *The Improvement of Instruction in Business Education* as an overall theme, this year's program will keynote the development of a comprehensive graduate program in business education at the University.

Prominent business educators who will participate in the program include Dr. Vernon Musselman, University of Kentucky; Dr. D. D. Lessenberry, University of Pittsburgh, and John Beaumont, Illinois State Supervisor of Business Education.

The conference is open without charge to all interested persons. Additional information is available from Dr. John L. Rowe, Chairman, Department of Business Education, University of North Dakota, Grand Forks.

Steering Committee, Golden Anniversary Issue of the *Journal*, l. to r.: Walter Arnold, Kansas, T & I; Lowell A. Burkett, AVA Assistant Executive Secretary; Martha Creighton, Va., Home Economics; Eleanor Brooke, *Journal* staff; Charles W. Sylvester, Md., Co-Chairman; Dorothy R. Davis, Managing Editor, *Journal*; M. D. Mobley, AVA Executive Secretary and Co-Chairman; Nancy H. Kane, AVA Publications Secretary; T. Carl Brown, N. C., Distributive Education; Roy G. Fales, N. Y., Industrial Arts Education; and Arthur B. Mays, Texas Consultant.

Special Journal Issue to Commemorate Golden Anniversary Convention

The JOURNAL Editorial Board, meeting in Washington February 27, 28, and the newly appointed Steering Committee for the Golden Anniversary issue of the AMERICAN VOCATIONAL JOURNAL that met in D. C. April 8 and 9 formulated careful plans for the commemorative JOURNAL.

The special issue will appear as the December, 1956, number but it will be available in time for inclusion in the envelopes that will be given to Golden Anniversary convention delegates upon registration.

Each phase of the program will have its own story of 50 years of progress. Other special featurees of this issue will include a 50-year history of the total program of vocational and industrial arts education; a 50-year history of the AVA and the organizations that merged to create it; and a 50-year history of *The Ship*.

This issue will show "then and now" photos of school buildings and it will also describe in full the legislative story of the vocational program.

Many other articles are planned so that this special issue will serve as a valuable reference resource as well as an important public relations media.

The JOURNAL Editorial Board worked out organizational procedure and determined much of the structure for the material that will be used. Editorial Board members determined assignments and agreed to review finally all of the articles that are to be published.

The Steering Committee, met to map further plans for the development of material. Field representatives have the option of calling in other persons for help in preparing their material. They will seek the counsel of the AVA Vice President from each field.

Journal Editorial Board, l. to r.: Russell K. Britton, Colo., T. & I.; William R. Mason, Ohio, industrial arts; M. D. Mobley, Editor-in-Chief; William B. Logan, distributive education; Dorothy R. Davis, Managing Editor; Eleanor Brooke, *Journal* staff; George P. Deyoe, agricultural education; Arthur L. Walker (representing McKee Fisk), business education, at the February meeting

PERSONALS

About B. Gordon Funk And Kermit A. Seefeld

The JOURNAL would like to ask a question. How could we have confused the two gentlemen whose pictures head this column?

As you pause, perchance, for thought, let us hasten to explain that in the January, 1956, issue of the JOURNAL, p. 22, we identified Kermit A. Seefeld (r.) as B. Gordon Funk (l.)!

With deep apologies to both, we present here a brief background on each so that there may be no further confusion!

Dr. Seefeld is Chairman of the Industrial Arts Department, University of California at Santa Barbara, Calif. He received the Bachelor of Education degree from Oshkosh State Teachers College in 1932 and attended summer schools at the University of Minnesota, the Chicago Art Institute, Princeton University, and Colorado A. and M., where he received a Master of Education degree in 1946. Additional graduate work was done at the University of Southern California, and he has his Ed.D., Stanford University, 1949.

A teacher for the Milwaukee public schools from 1932 to 1946, (during which time he was also an instructor for the Shorwood Vocational and Adult Evening School and for the Engineering Science Management War Training program for the University of Wisconsin) he has also worked for the Frentzel Engineering Company as a designer on a naval gun. He joined the staff of the University of California, Santa Barbara College, in 1946

He is a member of Phi Delta Kappa, Kappa Delta Pi, Iota Lambda Sigma, Epsilon Pi Tau, and Gamma Epsilon Tau.

B. Gordon Funk, Supervisor of Industrial Education in the Secondary Division of the Los Angeles city schools, is a graduate of the University of California. He did graduate work at Claremont College to earn his master's degree.

First joining the city schools in 1942 as a teacher in woodwork, he was appointed coordinator at North Hollywood High School in 1947. In 1948 he was named Supervisor of Industrial Arts for Senior High Schools, and in 1953 he was assigned the additional responsibilities of supervising the secondary trade and industrial education classes in Los Angeles.

Mr. Funk has had 14 years' industrial experience, including a 4-year apprenticeship in mill-cabinet work.

As a professional educator, he is charter member of the California Vocational Advisory committee, President of the southern section of the California Industrial Education Association, Vice President of the state association, a member of the advisory committee for San Diego State College, a member of Phi Delta Kappa and Epsilon Pi Tau.

John O. Conaway assumed his new duties as Indiana State Supervisor of Industrial Arts in February. An industrial arts teacher in Kokomo, Indiana since 1936, Mr. Conaway is currently writing his doctoral dissertation. Because of the pressing need for supervision in the smaller industrial arts centers in the state, H. G. McComb reports that Mr. Conaway will devote his early efforts to the one teacher shops and the more isolated areas. He is Indiana's first state supervisor of industrial arts.

———AVA———

Dr. and Mrs. Raymond W. Heim left the U. S. April 4 on the Queen Elizabeth for an European tour that will include visits to France, Italy, Switzerland, Germany, Holland, and England. They will return on the Queen Mary, arriving in New York City May 8.

Dr. Heim, who is Delaware State Director of Vocational Education, was honored by the National Association of State Directors of Vocational Education in 1955 upon his completion of 35 years as head of the Delaware vocational program.

———AVA———

Believe in yourself, but don't be too easily convinced.—Teacher Tipper.

Russell Sage Foundation Asks W. J. Micheels to Serve as Survey Consultant

Dr. William J. Micheels, Professor and Chairman, Department of Industrial Education, University of Minnesota, has been invited to serve as consultant on a large and important project on objectives of secondary education sponsored by the Russell Sage Foundation and the Educational Testing Service with the advisory assistance of the United States Office of Education.

This study will parallel the earlier survey by the Mid-Century Committee on Outcomes in Elementary Education. The Committee of Consultants with whom Dr. Micheels will serve, will for the purposes of this project define and specify the goals of general education at the secondary level.

Other nationally known educational leaders serving on the Committee of Consultants include Dr. Paul Buck, Provost, Harvard University, Dr. J. Paul Leonard, President, San Francisco State College, and Dr. Courtney C. Smith, President, Swarthmore College. Dr. Micheels attended the first meeting of the group in New York City on January 20-21, 1956.

———AVA———

Marvin G. Linson, Colorado Assistant State Supervisor of Agricultural Education since 1953, has been appointed State Supervisor of Agricultural Education to replace A. E. Bunger who is now Executive Director, State Board for Vocational Education.

M. D. Collins Receives AVA Award at Special Ceremonies

Dr. M. D. Collins, Georgia State Commissioner of Education who was announced as the recipient of an AVA award for outstanding service at 1955 AVA Convention, was presented with his AVA Citation at special ceremonies held in Atlanta during the annual Georgia Vocational Association breakfast March 16.

AVA President J. F. Ingram who spoke in behalf of the Association when he presented the framed citation to Dr. Collins said:

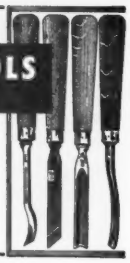
"For 25 years you have been at the helm of education in Georgia. Under your wise leadership great growth and progress has been made in education. From an appropriation of about three million dollars a year for public elementary and secondary education in 1932 (when Dr. Collins took office as State Superintendent), funds for education in Georgia have increased about 4,000 per cent (or 40 times) to about $120,000,000 a year. During those same 24 years vocational education in Georgia has grown from a very small program to one which today ranks fourth in the nation as to total enrollment. Only New York, California and Texas show larger total enrollments. . . .

"This award made to you by the American Vocational Association is our humble effort to express to you our recognition of and appreciation for your great service to the people of Georgia and to the people of America."

Dr. Collins was one of five educators named by the AVA in 1955 as the recipients of outstanding service awards. The annual AVA awards program cites persons from within and outside the program of vocational education for meritorious contributions to it.

L. to r.: Dr. M. D. Collins, Georgia State Commissioner of Education, AVA President J. F. Ingram and GVA President W. F. Burk at the GVA breakfast, March 16, when Dr. Collins accepted his AVA citation for outstanding contributions to vocational education in America.

New Imported
CARVING TOOLS
HOBBYCRAFT SETS
FINEST GERMAN STEEL
Complete Line of Chisels, Gouges & Parting Tools in Straight, Long Bend, Spoon, Back Bend & Fish Tail. Over 30,000 Tools in Stock. Liberal Discounts to Schools & Dealers.
FREE 8 Page Folder
FRANK MITTERMEIER (Est. 1936)
3577 E. Tremont Ave. New York 65, N.Y.



industrial training specialists

With degree in Industrial Education plus minimum of 5 years work experience in industrial training or related activities. To devise and develop specific training programs and courses, train instructors and audit and evaluate effectiveness of these programs for Company operations in Saudi-Arabia.

Write giving full particulars regarding personal history and work experience. Please include your telephone number.

Recruiting Supervisor, Box 77
ARABIAN AMERICAN OIL COMPANY
505 PARK AVENUE
NEW YORK 22, NEW YORK

GUEST EDITORIAL BY D. C. COMMISSIONER SAMUEL SPENCER

(Continued from page 4)

The value of this phase of secondary education increases daily as we face the task of maintaining a productivity caable of sustaining the standards of our peace-time economy and, at the same time, retaining our military respectability among the nations of the world. Due to the rapid and continuing advances in the sciences, vocational education is beset with new responsibilities every day in the training and retraining of skilled workers.

The Board of Commissioners of the District of Columbia believe that our five vocational high schools and our other public school programs contributing to industrial education are helping effectively to fulfill the skilled-manpower needs of local industry. The metropolitan area of Washington must recognize Government as its largest employer, with a wide range of occupations included. However, as a major urban center the area maintains substantial activity in construction, commerce, service and maintenance, transportation and other public utility fields. Recently, heavier private industry outside of these fields has appeared in some of the close suburban sections.

The Commissioners will continue to seek resources to promote the development and effectiveness of the program of vocational education in the District of Columbia. They wish to congratulate the American Vocational Association for its leadership, and to express their appreciation to the AMERICAN VOCATIONAL JOURNAL for the recognition given the Public Schools of the District of Columbia in this, the April 1956 issue.

SAMUEL SPENCER, *President*
Board of Commissioners, D. C.

IAPPC CABINET MEETS IN D. C.

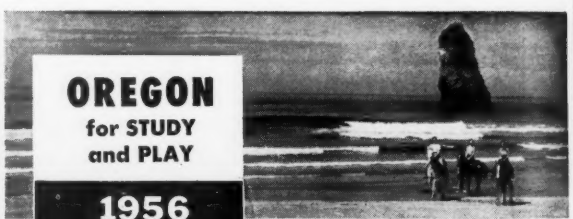
(Continued from page 33)

Dr. Shriver L. Coover, AVA Vice President for Industrial Arts and IAPPC Cabinet Chairman, was in charge of the meeting. Dr. Hunt discussed the fact that the office of Industrial Arts Specialist will be vacant in June, 1956, when his temporary appointment terminates. He will assume his new duties as Chief, Section of Secondary Education, USOE, at that time. Dr. Hunt also described his recent report Work Experience in Education and he explained that he hopes to complete soon a Study of Industrial Arts Teacher Education.

Plans for the industrial arts program at the 1956 AVA Convention were discussed. IAPPC has scheduled its annual business meeting for Wednesday, December 5, 8:00-10:00 A.M. IAPPC members are urged to submit suggested items to Dr. Coover.

Dr. Ernest R. Stotler, Supervisor of Industrial Arts, Akron, Ohio, will serve as Chairman of the National Conference of State and Local Supervisors of Industrial Arts. Frank C. Moore, Supervisor of Industrial Arts, Cleveland, Ohio, will chair a meeting on problems of supervision and teacher education.

Harry Thomas, Louisiana State Supervisor of Industrial Arts, appeared before the cabinet to discuss the organization and structure of the Industrial Arts Clubs of Louisiana. A committee that will study the existing industrial arts clubs was appointed.



OREGON
for STUDY and PLAY
1956
SUMMER SESSION
June 18 - August 10

OREGON STATE COLLEGE
Department of
INDUSTRIAL EDUCATION

BACHELOR AND MASTER DEGREES
Graduate programs, planned through personal conference, are highly individualized.

Bachelor's Degree requirements, for vocational trade and industrial teachers, provide for an evaluation of trade experience through examination to allow college credit.

The industrial arts program will meet the approval of any state department of education for either special or a general secondary credential.

Home Economics education provides opportunities for study in a diversity of areas — Methods of teaching, curriculum development, and teaching home management.

VOCATIONAL INDUSTRIAL EDUCATION
Two four-week terms — June 18-July 13, July 16-August 10.
Two-week workshop for supervisors and directors, June 18-29.
Two-week workshops in special occupational areas.

INDUSTRIAL ARTS
Eight-week term, begins June 18 (precedes NEA Convention).
Two-week workshop, July 9-20 (follows NEA Convention).

HOME ECONOMICS EDUCATION
Six-week term, June 18-July 27 (precedes NEA).
Two-week workshops, June 18-29 (precedes NEA). July 9-20 (follows NEA).

An outstanding visiting and resident faculty. Ample, excellent housing. Study where you are just two hours' drive from Oregon's famous beaches, scenic mountain wilderness, Columbia Gorge, Central Oregon's high plains.

For catalogs and detailed information write to

Director of Summer Session
OREGON STATE COLLEGE
Dept. D • Corvallis, Oregon
Authorized by Oregon State Board of Higher Education

Ohio Vocational Leader Honored

One of the highest honors that can be awarded a person is the heartfelt appreciation and admiration of his fellow men. This type of honor was freely expressed recently at a recognition dinner held in Wauseon, Ohio, in honor of one of Wauseon's home town boys. The recipient of this recognition was Ralph A. Howard, Ohio State Director of Vocational Education, who was born and reared near Wauseon and later served eight years as the teacher of vocational agriculture there.

The event, called "Ralph Howard Day," was planned and carried out entirely by former students in honor of Mr. and Mrs. Howard. Nearly every student who attended agriculture classes during the years Mr. Howard taught at Wauseon (1921-28) was in attendance to relive old memories and express appreciation for the work done by their former teacher.

Mert Galbraith, now an elementary principal at nearby York Township School, headed the overall committee. Bruce Borton, now a farm operator, and Wave Tedrow, also a farm operator, served with Mr. Galbraith.

Plans for the event were started at a class reunion when some of the class members were discussing their school days and the position now held by their former agriculture teacher. The idea of a recognition dinner sounded good to other members who were contacted and soon definite plans for "Ralph Howard Day" were made.

The big job of the planning committee was to get the names and addresses of all students who were in Mr. Howard's vo-ag classes. Many of the fellows had moved from the community and many had taken jobs outside of farming. All persons were located, however, and nearly every person attended.

After a potluck dinner a reminiscence period followed during which each former student introduced himself and his family and recalled incidents that highlighted his training under Mr. Howard. Mr. Howard countered with a brief history of what has happened in his life since leaving Wauseon. He expressed his appreciation for the people and the community where he had the privilege of working. Remarks were also offered by Harry E. Schwall, School Superintendent when Mr. Howard was a teacher; William Pees, Wauseon's present School Superintendent, and Earl Kantner, current vo-ag teacher. Bruce Borton was master of ceremonies.

The program was completed with further tributes to Mr. Howard for his fine work in agriculture and of his success in the ensuing years of work in the field of vocational education.—RALPH J. WOODIN, Executive Secretary, Ohio Vocational Association.

The planning committee for Ralph Howard Day, l. to r., standing: Ted Howard (brother), Cliff Lindley. Seated, Mert Galbraith, Bruce Borton, E. F. Kantner, and Wave Tedrow, in conference.

Why I Teach Contest

The National Security Committee of the American Legion Auxiliary has announced the subject of their 1956 teacher's contest. This year's subject for the essays of not less than 200 nor more than 300 words is *Why I Teach*. Any teacher who has taught at least five full school terms in an accredited grade or high school is eligible for the competition. All entries must be submitted not late than May 1, 1956. State prizes will be announced by each state chairman. There is a divisional prize of a $100 defense bond and a national prize of a $500 defense bond plus an all expense paid trip to the American Legion Auxiliary National Convention at Los Angeles. For further details and necessary forms, interested teachers should write to Mrs. Edgar A. Paulsen, National Security Vice Chairman, National Headquarters, American Legion Auxiliary, 777 North Meridian Street, Indianapolis 7, Indiana.

———AVA———

Named as a consultant to participate in Tuskegee Institute's self-study has been **Dr. Verne C. Fryklund,** President of Stout State College, Menomonie, Wisconsin. The Tuskegee study is an important factor in the Institute's Diamond Jubilee. Its goal is "to aid Tuskegee in clarifying its objectives, strengthening its program content, and improving its operation."

Dr. Fryklund was on the Tuskegee campus for almost a week at the end of March to observe and evaluate the School of Mechanical Industries. He also attended Tuskegee's Ninth Annual Trade and Engineering Conference.

ARCHIE S. ZOERB

Archie S. Zoerb, formerly State Supervisor of Trade and Industrial Education in Tennessee, died January 30, 1956, at St. Petersburg, Florida. Mr. Zoerb had retired for health reasons in 1952 from his position with the Tennessee Eastman Corporation, Kingsport, where he had served as Assistant Superintendent of Industrial Relations Division. During World War II he served in the U. S. Navy with rank of Lieutenant Commander, returning to Eastman in 1946. Survivors include his widow, Mrs. Donna Zoerb, one son, Lieutenant Colonel Daniel Zoerb of Turner Air Force Base, Albany, Georgia; and three grandchildren.

Zoerb held the B.S. degree from University of Tennessee. He served as the Tennessee State Supervisor from 1931-1937.

W. J. Kortesmaki, Jr., Minnesota FFA Executive Secretary, congratulates J. H. Tschetter, vo-ag teacher and FFA adviser in Fairmont, Minn., where the FFA chapter celebrated its 20th birthday.

Fairmont, Minn., Has FFA 20th Birthday

A glimpse of the past and a challenging look at the future was presented to Fairmont FFA members, former students, parents, businessmen and friends on February 22 at the High School Auditorium when some 275 persons celebrated the 20th Anniversary of Fairmont, Minnesota's FFA.

The past was reviewed by the return of many former FFA members and all of the four former FFA advisers and agriculture instructors. FFA President Mervin Malo was Program Chairman.

Welcome talks were given by Fairmont Public Schools Principal J. W. LeFor and John P. Brandenhoff, Mayor of Fairmont. W. J. Kortesmaki, Minnesota Executive FFA Secretary, and Mel Fahning, Past State FFA President, gave words of greetings.

Two former FFA members—Marlin Gratz, Vice President in 1936-37, and James App, Secretary in 1952-53, spoke.

J. H. Tschetter, present FFA adviser and agriculture instructor, presented the four former FFA advisers: Tom Raine, N. E. Haugland, Winfield Forsberg, and Edward Slettom.

From the Office of Education

The service of Adrian Trimpe, a member of the staff of Western Michigan College of Education, has been secured to advise the Division on studies concerned with the improvement and further development of distributive education, with special attention to training programs for small business establishments. Mr. Trimpe began his assignment March 5.

• • •

H. B. Swanson, Assistant Director of the Agricultural Education Branch, participated in the American Farm Bureau Young People's Leadership Training School at Southern University, Carbondale, Illinois, March 17-21.

• • •

John B. Pope, speaking recently to the Inter-Agency Committee on Nutrition and Consumer Education, discussed the objectives and procedures in the distributive education program. He pointed out the services that can accrue to the consumer from better trained sales personnel, particularly in the area of merchandise information.

• • •

Action research to improve homemaking education programs was highlighted in a one-day research meeting held in Memphis, Tennessee, February 20, prior to the Southern Regional Conference for home economics education leaders. Assisting with the conference were Beulah **Coon, Ata Lee,** and Selma Lippeatt of the Home Economics Education Branch.

The Division of Vocational Education has secured the service of Dr. W. F. Stewart of Ohio on a contract basis to advise on research and studies in vocational education. Dr. Stewart began his assignment February 20 and will be in the Division through June 30.

• • •

James H. Pearson met with the Federal Committee on Apprenticeship at its annual meeting in Washington, D. C., on March 21. He is the educational representative on the Committee.

• • •

For use during Future Farmers of America Week, February 18-25, the national FFA office distributed to State associations and local chapters 200,000 "FFA Week" seals and 30,000 posters. Also mailed to the States in February were 10,000 copies of the printed booklet "FFA 28th National Convention" presenting proceedings of the 1955 FFA convention.

• • •

Under the leadership of Johnie Christian and asisted by Selma Lippeatt of the Home Economics Education Branch, state supervisors and leaders of adult homemaking education in the Central Region met in Chicago, February 16-18, for a special conference on adult homemaking education. General sessions and group discussions centered on the meaning and purpose of adult homemaking education, methods of providing in-service training to teachers of adults, interesting adults in a broad program of homemaking education, setting up criteria for reimbursed programs in adult homemaking education, and using advisory councils.

• • •

Marguerite Scruggs, Lois Oliver and Elizabeth Denniston of the national office, Future Homemakers of America, were in Chicago, March 29-30, working on advance arrangements for the National FHA Convention to be held in that city July 2-6.

• • •

A new publication on distributive education, *Selection and Training of Part-Time Instructors,* has been issued by the Division of Vocational Education. It is intended to serve the local coordinator-teacher as a guide to the training of the instructors who will use the recently released *Guide for Part-Time Instructors.*

New AVA Membership Cards

Mailed out from Washington, D. C., recently to the entire AVA membership for 1956 were official AVA membership cards.

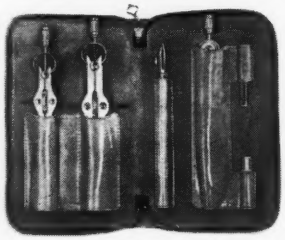
This is the first year that AVA headquarters has issued membership cards. They are intended to serve for identification purposes at the 1956 AVA Convention in St. Louis.

Many AVA members have campaigned for the issue of official AVA membership cards for some time. It is hoped that the new cards, which are of standard wallet size, will be useful to AVA members everywhere.

AVA membership cards will be issued annually from AVA headquarters.

DRAWING INSTRUMENTS

Illustrated is the VEMCO instrument set No. A171L, consisting of 6½" compass, 4½" compass, 6½" divider, pen attachment, Microliner ruling pen, and box of leads and points. Packed in smart California saddle leather pocket case.



AMERICAN MADE BY

VEMCO

(Parts always available)

All-steel construction of VEMCO drawing instruments provides lighter weight, as well as strength and rigidity necessary for the "heavy-duty" demands of modern drawing-room practice. VEMCO drawing instrument sets are available in different combinations to suit every drawing need.

Write today for your free copy of booklet "Historical Note on Drawing Instuments"

V. & E. Manufacturing Co.
Education Dept. J
P.O. BOX 950-M • PASADENA, CALIFORNIA
Drafting Equipment of Quality

VEMCO

McKNIGHT PUBLICATIONS

Celebrating 60 YEARS OF EXPANDING SERVICE TO EDUCATION
. . . with ultra-modern new home now under construction

☐ **General Shop BENCH WOODWORKING** NEW revised edition. By Fryklund and La Berge. Cloth bound $3.00; Paper Bound $1.25

☐ **MACHINE WOODWORKING** By Robert E. Smith. Covers operation of lathe, circular saw, band saw, jig saw, jointer, etc. $3.00

☐ **GENERAL SHOP METALWORK** By Dragoo & Reed. Basic beginner's text covers bench, sheet and art metal, ornamental metalwork, etc. $1.25

☐ **METALWORK TECHNOLOGY AND PRACTICE** Complete NEW EDITION AUG. 25, 1955. By O. A. Ludwig. Very comprehensive metalwork textbook. $4.40

☐ **GAS AND AC ARC WELDING** By R. E. Jennings. General text for beginners stresses common practices and safety measures. $1.25

☐ **FORGING AND WELDING** Completely REVISED AUG. 25, 1955. By Robert E. Smith. Illustrated. $1.25

☐ **MACHINING OF METAL** By Robert E. Smith. Instructions on operation and care of machines. Cloth cover $3.50

☐ **GENERAL SHOP ELECTRICITY** (Recently revised) By Dragoo & Porter. Beginner's text includes 26 projects. Many illustrations. $1.25

These are only some of McKnight's practical shop books. Books checked will be sent on 30 days approval.

McKNIGHT and McKNIGHT PUBLISHING COMPANY

Dept. 316, Market & Center Sts., Bloomington, Illinois

BOOKS AND BULLETINS

AGRICULTURAL EDUCATION

The Range and Pasture Book, by Roy L. Donahue, Everett F. Evans, and Lewis I. Jones. Prentice-Hall, Inc., Englewood Cliffs, N. J., 1956. 407 pages, $4.20.

Authentic information on grasses, grassland management, and the interrelationship of climate, soil, vegetation and land use are incorporated in this basic text for vocational agricultural programs.

BUSINESS EDUCATION

How to Put on a Grooming Program for Business Training. Educational Service Department MB, Bristol-Myers Products Division, 45 Rockefeller Plaza, New York 20, N. Y., 1956.

Two sets of leaflets and charts—for men and for women—on this subject are available without charge.

GENERAL

The School Administrator and The Press, by Benjamin Fine and Vivienne Anderson. Arthur C. Croft Publications, 100 Garfield Ave., New London, Conn., 1956. 112 pages.

Subtitled *How to present school news which editors will use,* this publication has been prepared by the Education Editor of The New York Times (Dr. Fine) and the Public Relations Specialist for the New York State Education Department. It is the first in a series of practical, working manuals to be published under the general title *Building Public Interest in Education.*

———AVA———

How to Pass National Merit Scholarship Tests, by Larry Van Treese and Harry A. Tarr, Arco Publishing Co., Inc., 420 Lexington Ave., New York 17, N. Y., 1956. 310 pages, $3.00.

Prepared to help high school students win college scholarships offered by the National Merit Scholarship Corporation, this publication includes study matter and sample questions on all examination subjects.

———AVA———

Helping High School Students Read Better, by Elizabeth A. Simpson. Science Research Associates, Inc., 57 W. Grand Ave., Chicago 10, Ill., 1954. 146 pages.

A program manual for teachers and administrators, this book begins with a chapter on suggestions for reading improvement programs in high schools and continues through examples of high school reading programs in action.

———AVA———

Educators Guide to Free Tapes, Scripts and Transcriptions, compiled and edited by Walter A. Wittich and Gertie L. Hanson. Educators Progress Service, Randolph, Wis., 1956. 161 pages.

This second edition is completely revised. Of the 258 listings, 153 are new. The number of sources providing these teaching aids has increased by 70 per cent.

FREE! This Beautiful BIG Illustrated
LEATHERCRAFT CATALOG
Make Leather Purses, Belts, Billfolds
J. C. LARSON CO., 820 So. Tripp Ave.
Department 5504, Chicago 24, Illinois
FREE! Big Illustrated Do-It-Yourself
METALCRAFT CATALOG
Make Aluminum, Copper, Foil Items
J. C. LARSON CO., 820 So. Tripp Ave.
Department 5504, Chicago 24, Illinois

The Regional Project in Secondary Education, by T. Bentley Edwards. University of California Publications in Education, Vol. 12, No. 1. University of California Press, Berkeley 4, Calif., 1956. 62 pages, $1.00.

Subtitled an *Evaluation of a Program of Cooperative Curriculum Development,* this monograph describes and assesses a program of cooperative curriculum development in some California high schools.

GUIDANCE

Health Career Horizons, 1790 Broadway, New York 19, N. Y., 1956.

HCH has a flier for young people and their parents and a set of posters available without charge. These materials supplement earlier publications designed to encourage young people to enter careers in health.

———AVA———

Vocational and Professional Monographs: *Metallurgy,* No. 33, 20 pp.; *Modeling,* No. 39, 22 pp.; *Personnel Administration,* No. 70, 18 pp.; *The Tool and Die Industry,* No. 77, 26 pp.; *Soap and Detergent Industry,* No. 80, 19 pp.; *Life Insurance,* No. 81, 32 pp.; *The American Motor Transport Industry,* No. 82, 40 pp.; *The Dairy Industry,* No. 83, 17 pp.; *Stock Brokerage Business,* No. 84, 29 pp.; *The Jewelry Industry,* No. 85, 26 pp.; *Numismatics,* No. 86, 16 pp. The Bellman Publishing Co., Cambridge 38, Mass., 1955. $1 each, with special discounts available.

Each monograph covers required personal qualifications, scholastic training, employment opportunities, remunerations, chances for advancement, and advantages and advantages of careers in the industry it is titled for. All are written by experts.

———AVA———

Understanding the Other Sex, by Lester A. Kirkendall and Ruth Farnham Osborne, 47 pp.; *Learning About Tests,* by Joseph C. Heston, 40 pp.; *Helping Children Manage Money,* 44 pages. Science Research Associates, 57 W. Grand Ave., Chicago 10, Ill., 1956. 50 cents each.

INDUSTRIAL ARTS

Selecting, Purchasing, Issuing, Financing, and Accounting for Industrial Arts Supplies in the Secondary Schools of Missouri, by Charles A. Bunten. The University of Missouri Bulletin, Vol. 57, No. 18, Education Series, No. 62. University of Missouri, Room 102, Building T-3, Columbia, Mo., 1956. 22 pages.

A summary report of a dissertation study by the same title, this publication presents the results of a statewide study made in cooperation with the State Department of Education and the industrial arts teachers of Missouri.

———AVA———

Selection and Management of Industrial Arts Equipment in the Secondary Schools of Missouri, by Ross J .McArthur. The University of Missouri Bulletin, Vol. 57, No. 17, Education Series, No. 61. University of Missouri, Room 102, Building T-3, Columbia, Mo., 1956. 29 pages.

This is a summary report of a dissertation study by the same title.

STOUT
STATE COLLEGE
Menomonie, Wisconsin
JUNE 18-23
Pre-summer Session Workshop
directed by
Dr. Paul Popenoe and
Mr. Roy Dickerson

JUNE 25-AUGUST 3
Six-Week and Three-Week Periods
Graduate and Undergraduate Programs
- Family Life Education
- Home Economics Education
- Industrial Education
- Vocational Education
- Liberal Arts
- Driver Education

An Outstanding Visiting Faculty
Excellent Housing at the Gateway to the Famous Recreational Area — The Wisconsin Indian Head Country.
Send for Summer Session Bulletin Now
DIRECTOR OF SUMMER SESSION
STOUT STATE COLLEGE
Menomonie, Wisconsin

NEW BOOKS for the PRINTING TRADES

Printing LAYOUT and Design

Over 350 pencil layouts showing good and poor practice. Color used to show use of printing color wheel, harmonies and use of color.
$4.75
IN COLOR
CLOTHBOUND

Practical Problems in Mathematics Printing Trades

Here is a simply and clearly written TEXT-WORKBOOK. Using a sound instructional format, it provides material in mathematics designed for the practical requirements of those in the printing trades.
Plastic NET $1.80
Ans. Book NET 1.00

WRITE NOW for prompt shipment of your Examination Copies
DELMAR PUBLISHERS
ALBANY 5, NEW YORK

Important RIDER texts for vocational training . . . acclaimed and adopted by schools everywhere!

3 new "picture book" courses derived from the Navy's electricity-electronics training program.

With these remarkable picture texts, the Navy teaches the basics of electricity . . . electronics . . . synchros & servomechanisms faster, easier, and more economically than ever before. Regardless of previous education, students master these vitally important subjects in *record* time. Now available to civilian schools, these picture books make it possible for *everyone* to take advantage of this unique pictorial approach.

Each course features easy-to-understand "show-how" drawings that comprise more than 50% of the entire material (a total of over 2,000 illustrations!). They present and explain every topic; make everything *picture clear.*

Subjects are taken up in the order of need, with a complete idea on every page. On that same page, at least one big "show-how" drawing illustrates and explains the topic in question. Review pages at the end of every section highlight the important topics just covered. In this step-by-step way, a solid foundation of knowledge is built, enabling the student to grasp instantly the following portion of the course.

BASIC ELECTRICITY

Paper bound: 5 volumes, 624 pages, 6" x 9" . . . only **$9.00** per set
Cloth edition: all 5 volumes in a single binding . . . only $10.50

BASIC ELECTRONICS

Paper bound: 5 volumes, 550 pages, 6" x 9" . . . only **$9.00** per set
Cloth edition: all 5 volumes in a single binding . . . only $10.50

BASIC SYNCHROS & SERVOMECHANISMS

Paper bound: 2 volumes, 270 pages, 6" x 9" . . . only **$5.50** per set
Cloth edition: both volumes in a single binding . . . only $6.95

Rider Manuals . . . Tailored to Teach

More and More Rider Manuals are being used by Vocational Schools, & School Shops as training references.
Rider Manuals help make teaching easier because circuit functioning is explained thoroughly—

- Because the latest design—ideas of receivers are described
- Because the information is complete
- Because the information covers current receivers as small as old receivers.
- Because the information is technically accurate.
- Because the information is prepared by the people who know the product best—(the receiver manufacturer)

You can get your Rider Manuals at **special school prices**—which are exceptionally low.
Rider Manuals are printed in limited quantities—make sure you place your order as early as possible—why not issue a standing order, with us NOW!

Obtaining & Interpreting Test Scope Traces

A complete explanation of waveforms appearing on the oscilloscope screen, with more than 800 waveform illustrations to throw the ideal, practical, and distorted versions of the most commonly encountered scope traces: am and fm radio receivers, tv receivers, audio amplifiers, power supplies test equipment. A thoroughly practical text that tells and shows how to aplpy the scope. Paper bound: only **$2.40**

Advanced TV Servicing Techniques

A practical step-by-step course developed by the Radio-Electronics Television Mfgrs. Association to provide uniform servicing procedures throughout the country. Each major section of the tv receiver is treated separately—the course shows how to service every part—how to pin-point the trouble by means of the latest in testing methods. Endorsed by the entire electronics industry, the national Better Business Bureau, and educators everywhere, this is the finest course available!

MAIN TEXT: 176 pp; 8½ x 11; paper bound; only **$3.60**

LAB WORKBOOK: 33 pp; 8½ x 11; paper bound; only **95c**

INSTRUCTOR'S GUIDE: Available to schools at no charge.

NOW AVAILABLE

2 new visual aids—35 mm. Film Strips

Strip #1—43 35 mm frames showing faulty picture tube patterns: Sweep Circuit Troubles, Sync Circuit Troubles, Video Circuit Troubles, Power Supply Troubles, TV Interference Troubles.

Cat. #FS161, 43 frames, 35mm, only **$4.00**

Strip #2—One hundred and fifteen 35 mm frames showing every single illustration appearing in the "Advanced Television Servicing Techniques" main text.

Cat. #FS161-2, 115 frames, 35 mm, only **$11.00**

Buy them both for $14.00

JOHN F. RIDER PUBLISHER, INC. 480 CANAL ST., NEW YORK 13, N. Y.

A Simple Guide to Blueprint Reading, with Applications to Aircraft, by William N. Wright. McGraw-Hill Book Co., Inc., 330 W. 42nd St., New York 36, N. Y., 1956. 120 pages, $7.00.

A revised edition of *A Simple Guide to Blueprint Reading*, the purpose of this text is to acquaint the student with the principles upon which the art of blueprint reading is based, with particular emphasis on the need for understanding the language of the profession.

TRADE & INDUSTRIAL

Automotive Mechanics, by William H. Crouse. McGraw-Hill Book Co., Inc., 330 W. 42nd St., New York 36, N. Y., 1956. 726 pages, $5.20.

With a few exceptions, this third edition covers the full content of the automotive courses listed in the Automotive Industry-Vocational Education Conference's *Standards for Automotive Service Instruction in Schools.*

———AVA———

Modern Oscilloscopes and Their Uses, by Jacob H. Ruiter, Jr. Rinehart & Company, Inc., 232 Madison Ave., New York 16, N. Y., 1956. 346 pages, $6.50.

All of the chapters in this revised edition have been brought up to date in keeping with the progress of electronics. It includes a brand new chapter on quantitative measurements.

———AVA———

Construction Planning, Equipment and Methods, by R. L. Peurifoy. McGraw-Hill Book Publishing Co., 330 W. 42nd St., New York 36, N. Y., 1956. 534 pages, $7.00.

This book applies the fundamentals of engineering, as a science, to the field of construction. It offers a complete development of job planning, job layout, and record keeping.

From the Nation's Capital

(Continued from page 3)

determined effort to expand trade with free nations as well as communist-dominated nations. This was shockingly set forth in the article, *"Why Russia Sees Victory Without War,"* that appeared in the March 16, 1956 issue of U. S. NEWS AND WORLD REPORT. This article and other recent news releases confirm some of the things I have been saying for more than six years.

The future of the United States—the well-being of its people and the security of the nation—is tied inseparably with the skill and productivity of our people. Vocational, technical and scientific training programs at all levels must be expanded and improved if we are to win the economic war that is beginning to take form. Vocational and practical arts education are tools that must be fully utilized, if we are to remain strong and free.

M. D. MOBLEY,
Executive Secretary

APPRENTICE AND OTHER TECHNICAL BOOKS

PORTLAND BOOK STORE

412 S.W. 3rd Ave. **Portland 4, Or**

"Fast Service Anywhere in the Northwest"